www.prolink2u.com

PROLiNK® WNR1008

3.75G Wireless-N 4-Port Gigabit Router

User's Manual

Version 1.00

(English)

FEDERAL COMMUNICATION COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CAUTION:

1. To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.
2. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

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CHAPTER 1: INTRODUCTION

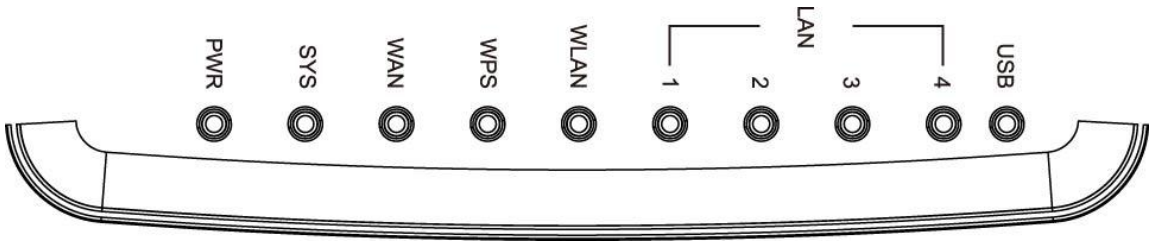
The **PROLiNK® WNR1008 3.75G Wireless-N 4-Port Gigabit Router** supports 4 ports 10/100/1000M Ethernet for LAN and 1 port 10/100/1000M Ethernet interface for WAN. With the advanced MIMO technology, it can support the data transmission rate 6 times more (up to 300 Mbps) and the coverage 3 times more than IEEE 802.11b/g devices. The Wireless Router enables your whole network sharing a high-speed cable or DSL Internet connection. With it, you can share a high-speed Internet connection, files, printers, and multi-player games at incredible speeds, without the hassle of stringing wires. It also offers easy configuration for your wireless network at home and presents wireless network of high functionality, security, and flexibility.

1.1. FEATURES

- Support 4 ports 10/100/1000M Ethernet for LAN and 1 port 10/100/1000M Ethernet interface for WAN.
- Clock rate up to 600MHz.
- Support the IEEE 802.11n/b/g standard, high speed data rate up to 300Mbps, two transmit and two receive path (2T2R)
- High security with build-in Security: WEP 64/128, WPA, WPA2, 802.1x and 802.11i.
- Supports 1 additional USB port.
- Supports WPS (Wi-Fi Protected Setup) with physical push button.
- High security with build-in Security: WEP 64/128, WPA, WPA2, 802.1x and 802.11i.
- Support Client, AP, WDS, AP+WDS mode.
- Advanced Quality of Service (QoS), WMM.
- Easy web browser configuration for home user setup.
- Support USB Network attached storage (NAS) and media share function.

1.2. Physical Details

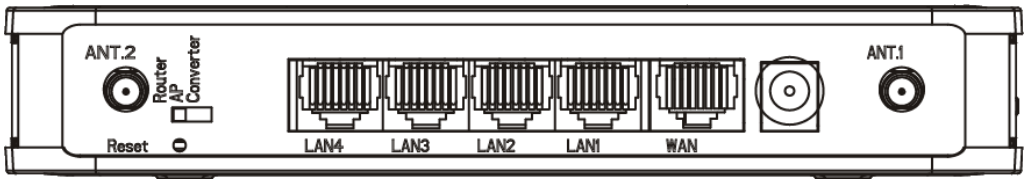
Top LEDs (Top view)



LED Behavior				
LED	**Printed**	**Color**	**Behavior**	**Indication**
Power	**PWR**	Green	ON	Power on
			OFF	Power off
System	**SYS**	Green	ON	System is ready to login web server
			OFF	System is not ready to login web server
			Blinking	System is set to factory default
Internet	**WAN**	Green	ON	Internet link / active
			OFF	Internet function off
			Blinking	Internet traffic transmitting

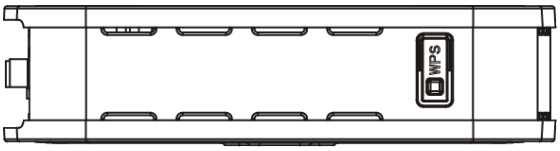
WPS	**WPS**	Green	ON	WPS setup successfully
			OFF	WPS is disabled
			Blinking	WPS is enabled to make a connection
Wireless LAN	**WLAN**	Green	OFF	WLAN off
			ON	WLAN link / active
			Blinking	WLAN traffic transmitting
LAN	1 2 3 4 LAN	Green	OFF	LAN function off
			ON	LAN link / active
			Blinking	LAN traffic transmitting
USB	**WPS**	Green	ON	USB is connected
			OFF	USB is disconnected

Ports and Buttons (Rear view)

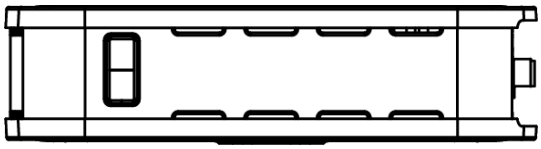


Ports and buttons	
Ant. 1 **Ant. 2**	**Install the appending antennas here.**
Reset	● **Press 2 seconds, the LED will be off.** ● **Keep on pressing reset button 2~5 seconds, the system will reboot automatically.** ● **Keep on pressing the reset button more than 5 seconds, the Wireless Router will set all setting back to factory default.**
LAN 1-4	**Use standard LAN cables (RJ45 connectors) to connect your PCs to this port. If required, any port can be connected to another hub. Any LAN port will automatically function as an "Uplink" port when necessary.**
WAN	**Connect the ADSL or Cable Modem here with RJ45 cable. If your modem came with a cable, use the supplied cable, otherwise, use a standard LAN cable (RJ45 connectors).**
DC 12V	**Connect the supplied power adapter here.**

Side Panel (Side view)



(Left sideview)



(Right sideview)

Left-sideview	
WPS	**To enable the WPS function press the physical WPS button on the Wireless Router once, then the LED will start to flash. Please make a connection with other WPS supported device within 2 minutes.**

Right-sideview	
USB	**Insert the USB 3.5G card that provided by your ISP (Internet Service Provider) or USB network attached storage here.**

CHAPTER 2: ABOUT OPERATION MODES

This device provides operational applications with Router, AP and Converter modes, which are mutually exclusive. This device is shipped with configuration that is functional right out of the box. If you want to change the settings in order to perform more advanced configuration or even change the mode of operation, you can MANUALLY switch to the mode you desired by the manufacturer as described in the following sections.

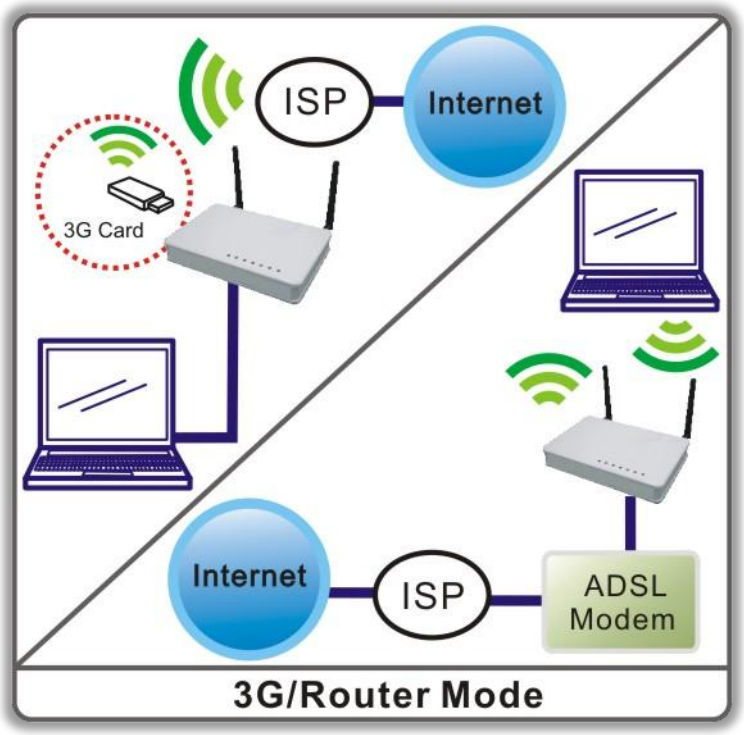
2.1. Operation Modes

You have to MANUALLY switch the bar into the mode you preferred, Router, AP or Converter modes, then the device will reboot automatically into the mode you have selected.

2.2. Router Mode

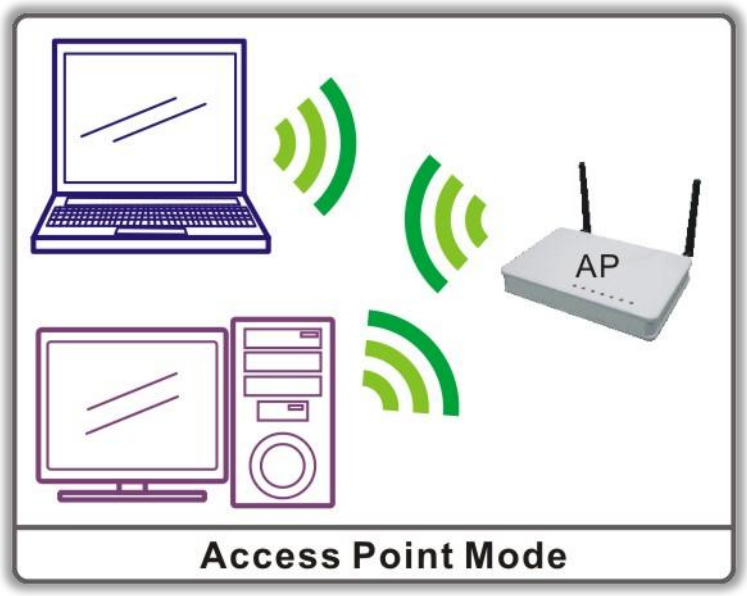
In this mode, the device is supposed to connect to internet via ADSL/Cable Modem. The NAT is enabled and PCs in LAN ports share the same IP address to ISP (Internet Service Provider) through WAN port. The connection type can be setup in PPPoE, DHCP client, PPTP client, L2TP client or static IP.

The wireless connection will be set up from a point-to-point LAN into a point-to-multipoint WAN. This device connects all the stations (PC or notebook with wireless function) to a wireless network. All stations can have the Internet access if only the device has the Internet connection.



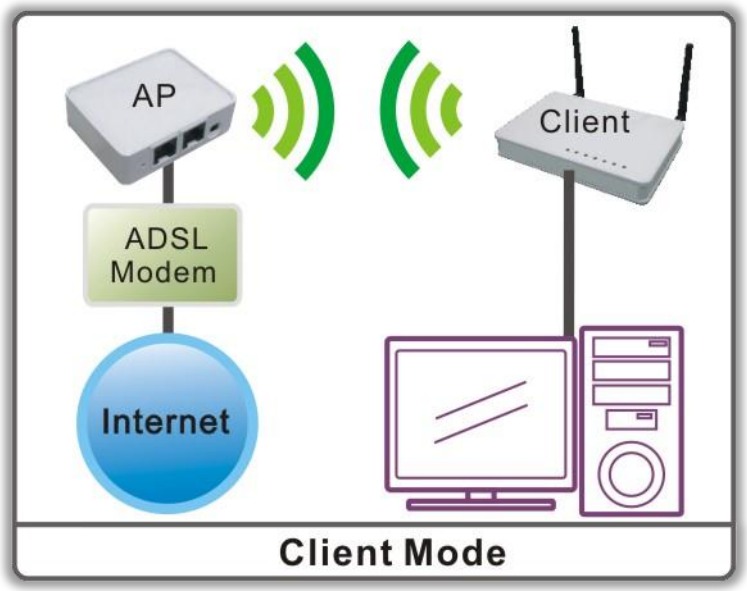
2.3. Access Point Mode

When acting as an Access Point (AP), this device connects all the stations (PC/notebook with wireless network adapter) to a wireless network. All stations can have the Internet access if only the Access Point has the Internet connection.



2.4. Converter Mode

If set to Converter mode, a device connects to each other through an access point or a base station (gateway or router.) This device can work like a wireless station when it's connected to a computer directly, so that the computer can send packets from wired end to wireless interface.



CHAPTER 3: CONFIGURATION

3.1. Hardware Connection

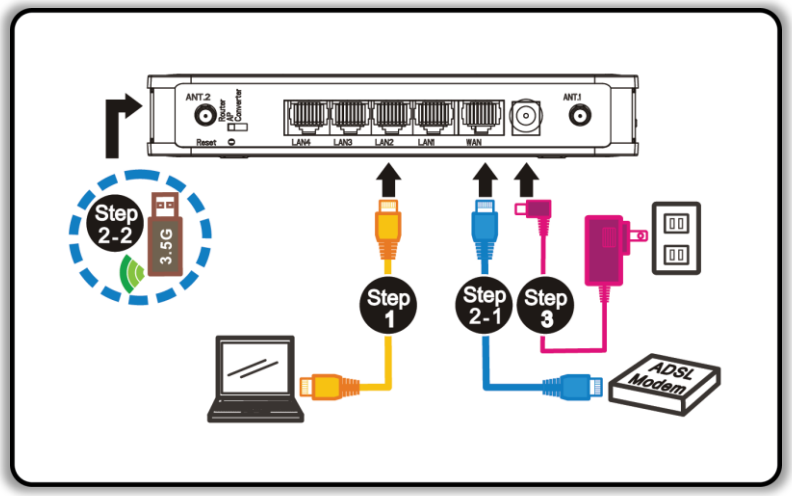
Step 1. Connect one end of the Ethernet cable to the LAN port (1~4) of the Wireless Router, another end to your PC or notebook.

Step 2. There are two connection methods to connect to Internet **(Only one can be used)**:

2-1. Connect Ethernet cable one end to the WAN (Internet) port of the Wireless Router, the other end to the ADSL or cable modem.

2-2. Or you can insert 3.5G USB card (that provide by your ISP) into USB port.

Step 3. Finally, connect the Wireless Router with a power to an outlet.

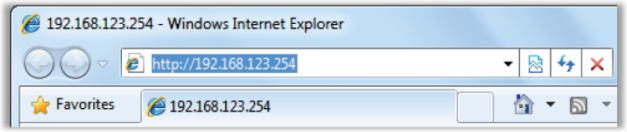


3.2. Login

1. Start your computer and make sure the connection by an Ethernet cable between your computer and the Wireless Router.

2. Start your Web Browser.

3. In the *Address* box, enter the IP address of the Wireless Router, as in this example, which uses the Wireless Router's default IP address: **http://192.168.123.254**



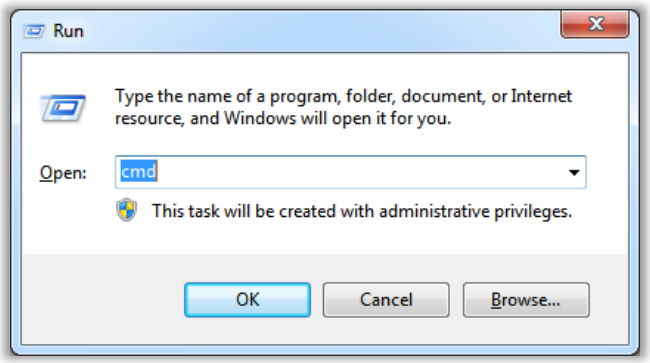
4. After connected successfully, the following screen will show up. Simply enter the username "**admin**" and password "**password**" to login.

Windows Security
The server 192.168.1.254 at WNR1008 requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
admin
Remember my credentials
OK
Cancel

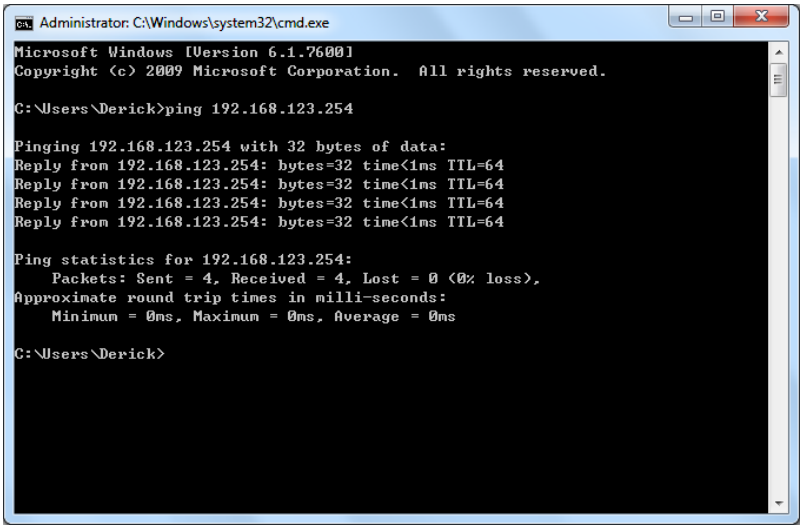
Refer to below troubleshooting,

- ***If you encounter difficulty for connecting the WNR1008***
- ***If the WNR1008 does not respond***

- The Wireless Router is properly installed, LAN connection is OK, and it is powered ON. You can test the connection by using the "Ping" command:
  Please go to **Start**>**Run...**> Enter "**cmd**" command in the column to open the MS-DOS window.


Run
Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:
cmd
This task will be created with administrative privileges.
OK
Cancel
Browse...

  Enter the command: **ping 192.168.123.254**


Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\Derick>ping 192.168.123.254
Pinging 192.168.123.254 with 32 bytes of data:
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Ping statistics for 192.168.123.254:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Derick>

  If no response is received, either the connection is not working, or your PC's IP address is not compatible with the Wireless Router's IP Address. (See next item.)

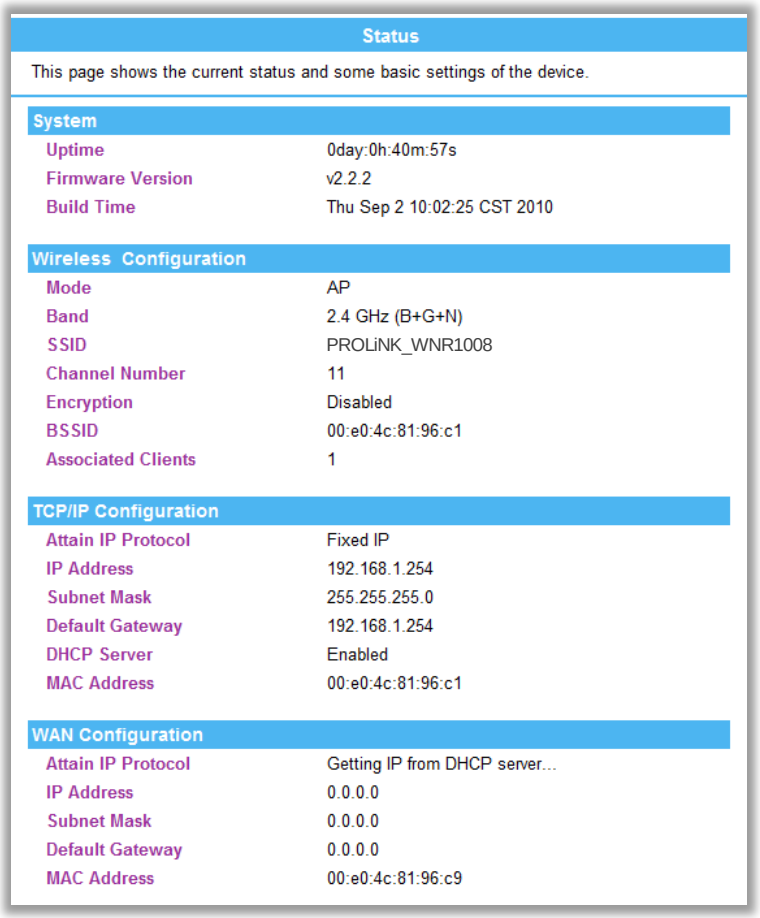
- If your PC is using a fixed IP Address, its IP Address must be within the range 192.168.123.1 to 192.168.123.253 to be compatible with the Wireless Router's default IP Address of 192.168.123.253. Also, the Network *Mask* must be set to 255.255.255.0. See *Chapter 4 - PC Configuration* for details on checking your PC's TCP/IP settings.
- Ensure that your PC and the Wireless Router are on the same network segment. (If you don't have a router, this must be the case.)
- Ensure you are using the wired LAN interface. The Wireless interface can only be used if its configuration matches your PC's wireless settings.

Common Connection Types

The Internet connection type is according to the ISP (Internet Service Provider) that you selected or subscribed.

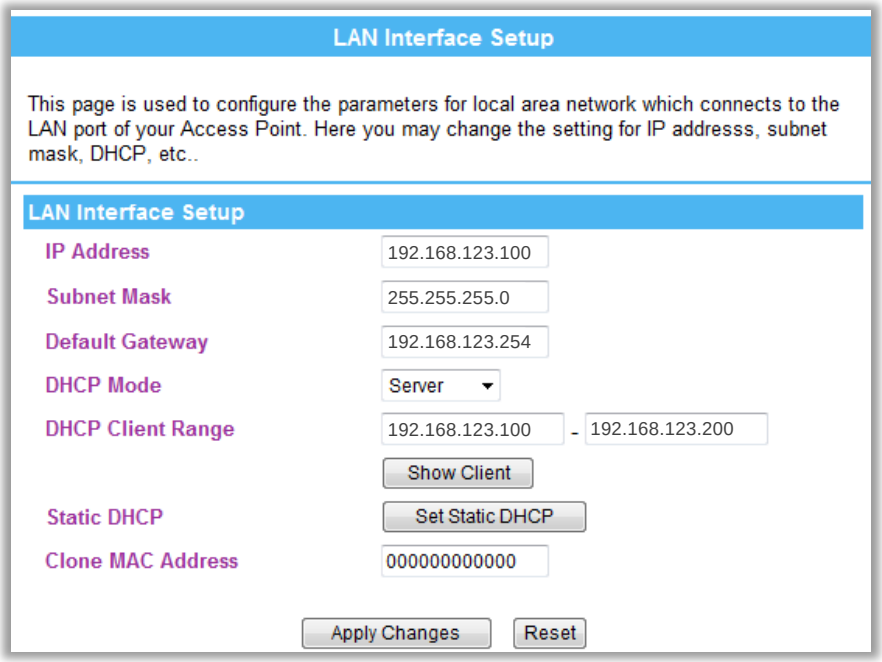
Modem Type	IP Type	Details	ISP Data required
Cable Modem	Dynamic IP address	Your IP address is allocated automatically, when you connect to you ISP.	Usually, none. However, some ISP's may require you to use a particular Hostname, Domain name, or MAC (physical) address.
	Static (Fixed) IP address	Your ISP allocates a permanent IP address to you.	IP address allocated to you. Some ISP's may also require you to use a particular Hostname, Domain name, or MAC (physical) address.
DSL Modem	Dynamic IP address	Your IP address is allocated automatically, when you connect to you ISP.	None.
	Static (Fixed) IP address	Your ISP allocates a permanent IP address to you.	IP address allocated to you.
	PPPoE	You connect to the ISP only when required. The IP address is usually allocated automatically.	User name and password.
Other (eg: 3.5G Wireless Card)	Dynamic IP address	Your IP address is allocated automatically, when you connect to you ISP.	The ISP's may require you to use a particular Hostname, Domain name, or MAC (physical) address.

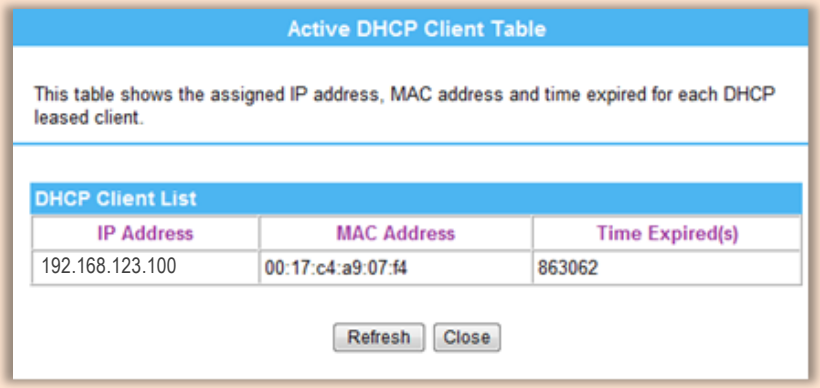
3.3. Status

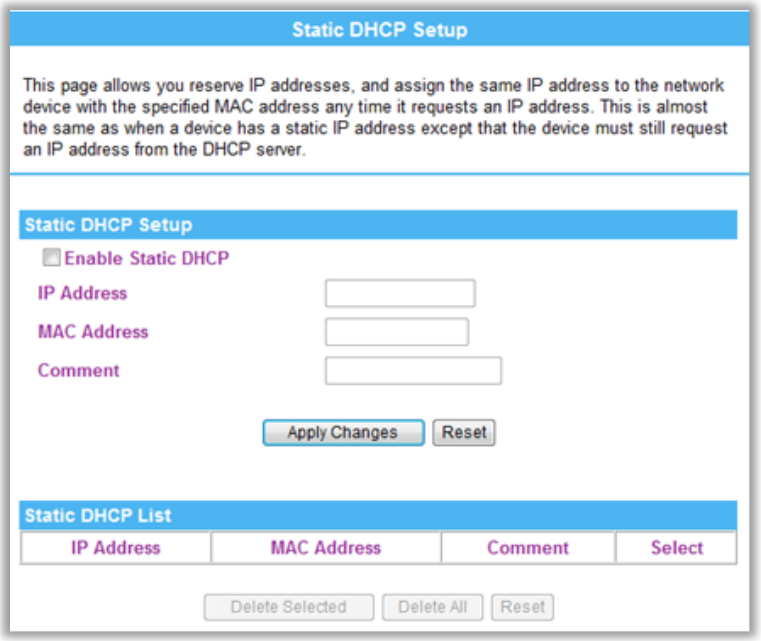


3.4. Network

LAN Interface Setup

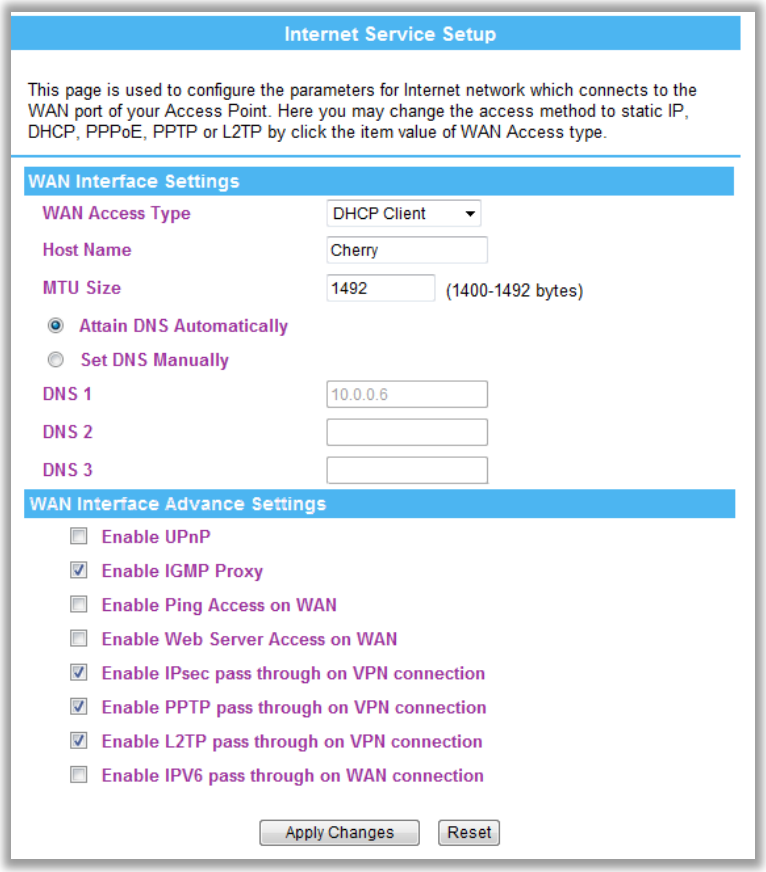


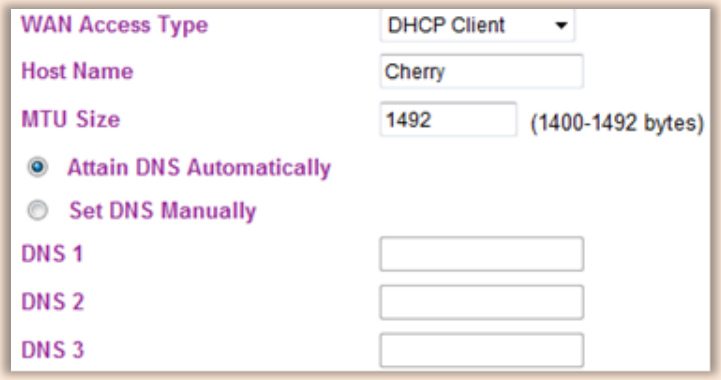
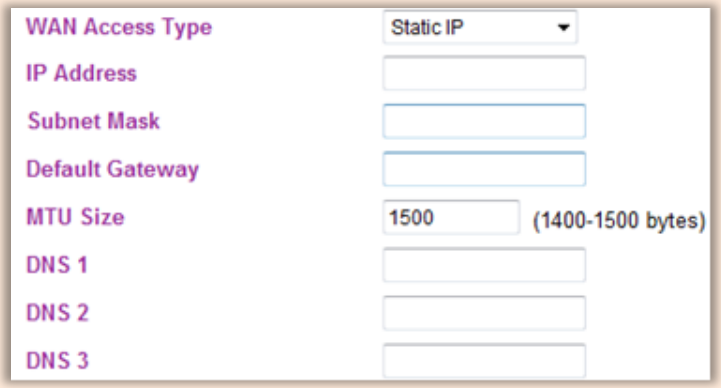
Item / Function	Descriptions / Instructions
IP Address	Shows the IP address of the Wireless Router (Default IP address is 192.168.123.254)
Subnet Mask	The subnet mask of the Wireless Router (Default subnet mask is 255.255.255.0.)
Default Gateway	Shows the default gateway of this Wireless Router.
DHCP Mode	**Disable**: Select to disable this Wireless Router to distribute IP addresses to connected clients. **Server**: Select to enable this Wireless Router to distribute IP addresses (DHCP Server) to connected clients. And the following field will be activated for you to enter the starting IP address. **Client**: Select the client mode to use the
DHCP Client Range	The starting address of this local IP network address pool. The pool is a piece of continuous IP address segment, the device will distribute IP addresses from 192.168.123.100 to 192.168.123.200 to all the computers in the network that request IP addresses from DHCP server (Router). The end IP address maximum is 253. ***Note:*** If "Continuous IP address pool starts" is set at 192.168.123.1 and the "Number of IP address in pool end" is 253, the device will distribute IP addresses from 192.168.123.100 to 192.168.123.253 to all the computers in the network that request IP addresses from DHCP server (Router). Click **Show Client** button to show **Active DHCP Client Table**. The table shows assigned IP address, MAC address and time expired for each client.  **Refresh**: Click this button to refresh the table. **Close**: Click this button to close the window.
Static DHCP	Check the box to enable the Static DHCP function, default setting is disabled. When set to enabled, user can click **Set**

	Static DHCP button to set the **Static DHCP** function.  **IP Address**: Enter the fixed IP address that DHCP Server assigned to a certain connected station. **MAC Address**: Enter the MAC address of a certain station, and then the DHCP Server will to distribute a fixed IP address to the station automatically once they connected. **Comment**: You can enter a comment to description above IP address or MAC address. **Apply Changes:** After completing the settings on this page, click Apply changes button to save the settings. **Reset:** Click Reset to restore to default values. **Static DHCP List**: Here shows the static IP addresses that have been assigned according to the MAC address. **Delete Selected**: Click Delete Selected to delete items which are selected. **Delete All**: Click **Delete All** button to delete all the items. **Reset**: Click **Reset** button to rest.
Clone MAC Address	This table displays you the station MAC information.

Static DHCP Setup
This page allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.
Static DHCP Setup
Enable Static DHCP
IP Address
MAC Address
Comment
Apply Changes
Reset
Static DHCP List
IP Address
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

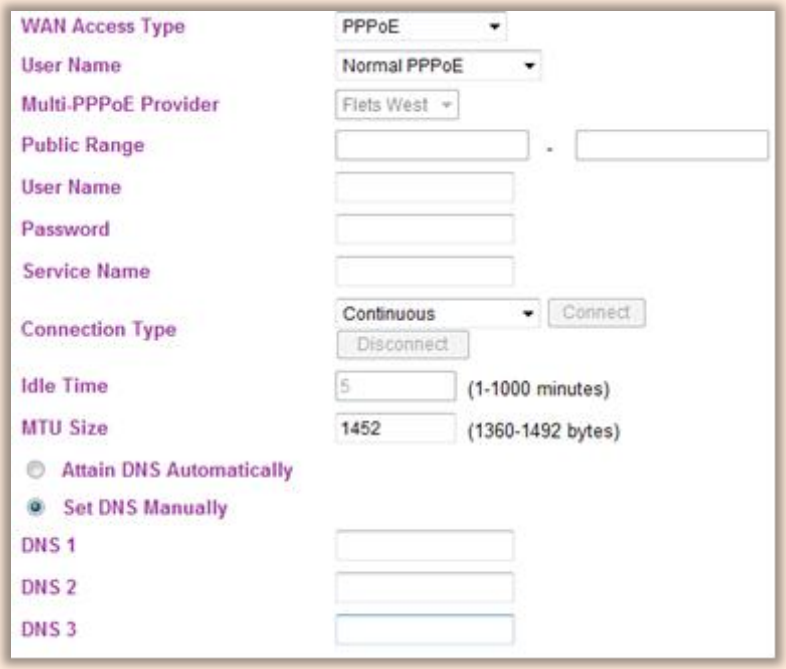
Internet Service Setup


Internet Service Setup
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, PPTP or L2TP by click the item value of WAN Access type.
WAN Interface Settings
WAN Access Type
DHCP Client
Host Name
Cherry
MTU Size
1492
(1400-1492 bytes)
Attain DNS Automatically
Set DNS Manually
DNS 1
10.0.0.6
DNS 2
DNS 3
WAN Interface Advance Settings
Enable UPnP
Enable IGMP Proxy
Enable Ping Access on WAN
Enable Web Server Access on WAN
Enable IPsec pass through on VPN connection
Enable PPTP pass through on VPN connection
Enable L2TP pass through on VPN connection
Enable IPV6 pass through on WAN connection
Apply Changes
Reset

Item / Function	Descriptions / Instructions
WAN Access Type	Select the WAN Access Type **Static IP, DHCP Client, PPPoE,** or **Mobile Networks** from the pull-down list. Default setting is **DHCP (Auto Config)** enabled. **DHCP Client**  If the DHCP Client be selected, the computer will obtain the IP address automatically. **Hostname:** Enter the hostname that assigned IP address to your computer in this field. Maximum input is 32 alphanumeric characters (case sensitive). **MTU Size:** The most appropriate MTU (Maximum Transmission Unit) namely the maximum packet size, the default value is 1492 for your application. Reducing the packet size can help connecting to certain web sites or speeding up packet transfer rate. If the incorrect packet size is entered, you may not be able to open certain web sites. Select to **Attain DNS Automatically** or select **Set DNS Manually** to set the DNS server IP address at the following DNS 1~3 columns. Default setting is **Attain DNS Automatically**. **DNS 1**: Enter the DNS server IP address (es) provided by your ISP, or you can specify your own preferred DNS server IP address (es). **DNS 2~3:** This servers are optional. You can enter another DNS server's IP address as a backup. DNS 2 and 3 servers will be used when the DNS 1 server fails. **Static (Fixed IP)**  If the Static IP be selected, user have to set up the IP address, subnet mask and default gateway according to the ISP (Internet Service Provider) that provide the related information. **IP Address:** Enter the WAN IP address provided by your ISP here. **Subnet Mask:** Enter the subnet mask here. **Default Gateway:** Enter the default gateway IP address provided by your ISP here. **MTU Size:** The most appropriate MTU (Maximum Transmission Unit) namely the maximum packet size, the default value is 1492 for your application. Reducing the packet size can help connecting to certain web sites or speeding up packet transfer rate. If the incorrect packet size is entered, you may not be able to open certain web sites. Select to **Attain DNS Automatically** or select **Set DNS Manually** to set the DNS server IP address at the following DNS 1~3 columns. Default setting is **Attain DNS Automatically**. **DNS 1**: Enter the DNS server IP address (es) provided by your ISP, or you can specify your own preferred DNS server IP address (es). **DNS 2~3:** This servers are optional. You can enter another DNS server's IP address as a backup. DNS 2 and 3 servers

will be used when the DNS 1 server fails.

PPPoE



If the PPPoE be selected, user have to set up the user name and password according to the ISP (Internet Service Provider) that provided the related information.

PPPoE Type: Select the PPPoE types, Normal PPPoE, Multiple PPPoE and Unnumbered PPPoE form the pull-down menu.

Multi-PPPoE provider: If user select Multiple PPPoE type, user have to setup the PPPoE provider here. Select Flets West, Next West, Flets East, and Flets Next from the pull-down menu.

Public Range: If user selected Unnumbered PPPoE type, have to setup the range here.

User Name: Enter the username that provide by your ISP (Internet Service Provider). Maximum input is 32 alphanumeric characters (case sensitive).

Password: Enter the password that provide by your ISP. Maximum input is 32 alphanumeric characters (case-sensitive).

Service Name: Enter the Internet service provider's name here.

Connection Type: Select the connection type **Continuous**, **Connect on Demand** or **Manual** from the pull-down menu. If selected **Manual** user can click **Connect** button to make a connection.

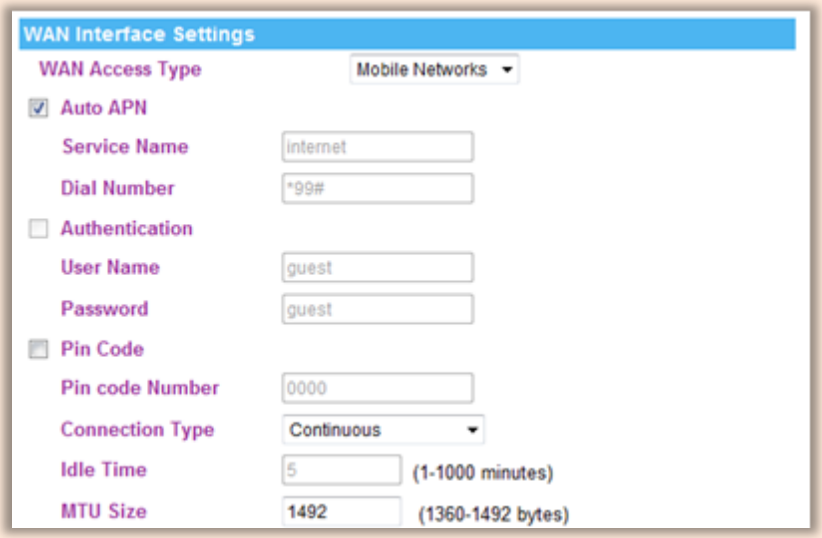
Idle Time: It represents that the device will idle after the minutes you set. The time must be set between 1~1000 minutes. Default value of idle time is 5 minutes. This function will be available when the **Connection Type** is selected to **Connect on Demand**.

MTU Size: MTU (Maximum Transmission Unit, namely the maximum packet size) for your application. Reducing the packet size can help connecting to certain web sites or speeding up packet transfer rate. If the incorrect selection is entered, you may not be able to open certain web sites.

Connection Type: Select the connection type **Continuous**, **Connect on Demand** or **Manual** from the pull-down menu. If selected **Manual** user can click **Connect** button to make a connection.

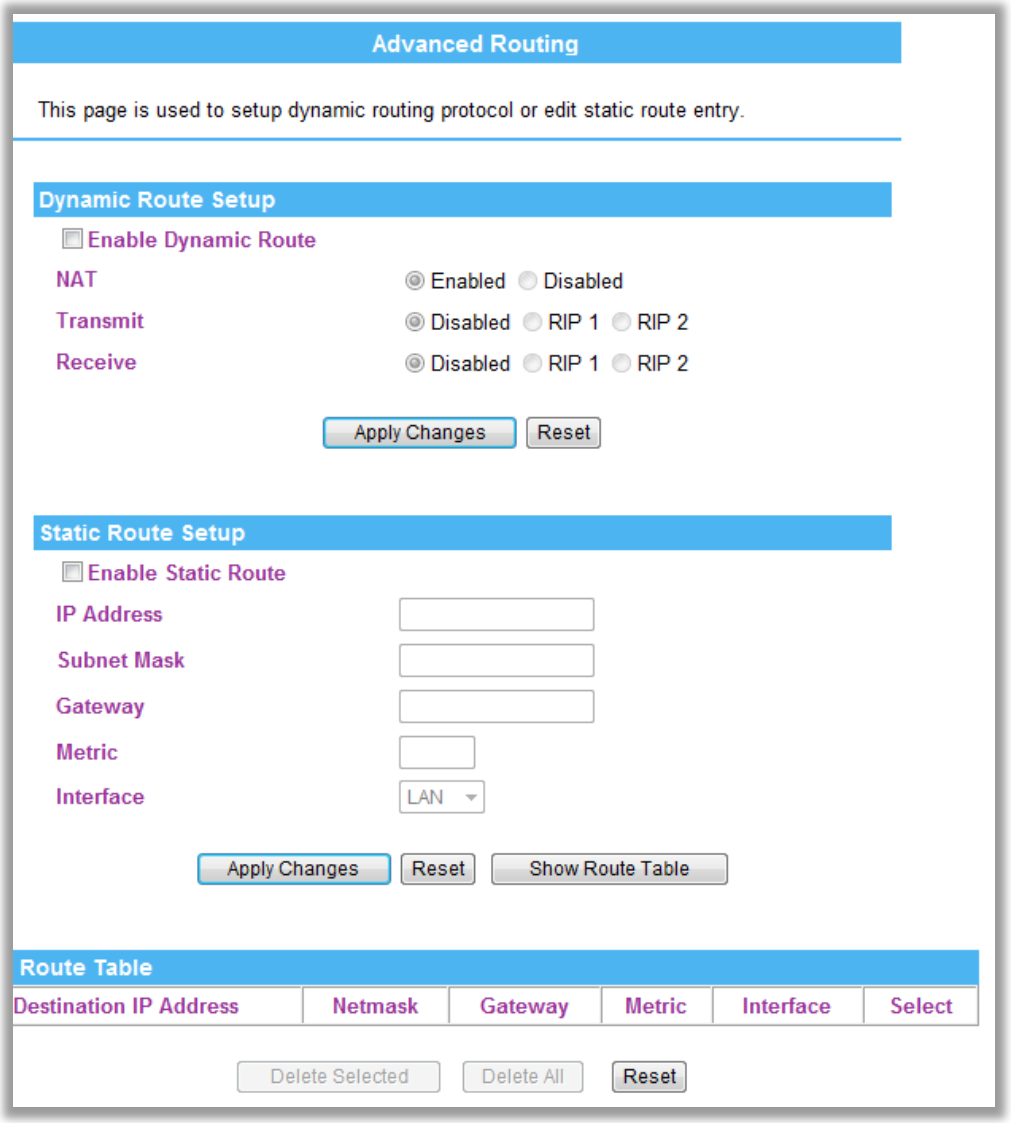
Idle Time: It represents that the device will idle after the minutes you set. The time must be set between 1~1000 minutes. Default value of idle time is 5 minutes. This function will be available when the **Connection Type** is selected to **Connect on Demand**.

Mobile Networks

	 **User have to insert USB card that provide by Internet service provider into the USB port of the wireless router first, therefore, the Mobile networks function can be used.** **Auto APN:** APN (Access Point Name.) If this function be selected, the system will auto detect the mobile network setting via the USB that provide by the Internet service provider (ISP). To use the default settings is recommend. **Service Name**: Keep the default setting or enter the service name that ISP provided. **Dial Number**: Keep the default setting or enter the dial number that ISP provided. **Authentication**: Check the box to enable to authentication function. ● **User Name**: Enter the user name that provide by your ISP. ● **Password**: Enter the password that provide by your ISP. **Pin code**: Keep the default setting or enter the SIM card Pin code that ISP provided. **Connection Type**: Select the connection type **Continuous**, **Connect on Demand** from the pull-down menu. **Idle Time**: It represents that the device will idle after the minutes you set. The time must be set between 1~1000 minutes. Default value of idle time is 5 minutes. This function will be available when the **Connection Type** is selected to **Connect on Demand**. **MTU Size**: MTU (Maximum Transmission Unit, namely the maximum packet size) for your application. Reducing the packet size can help connecting to certain web sites or speeding up packet transfer rate. If the incorrect selection is entered, you may not be able to open certain web sites.
Enable uPNP…	Check to enable the listed functions.
Apply	After completing the settings on this page, click **Apply** button to save the settings.
Cancel	Click **Cancel** to restore to default values.

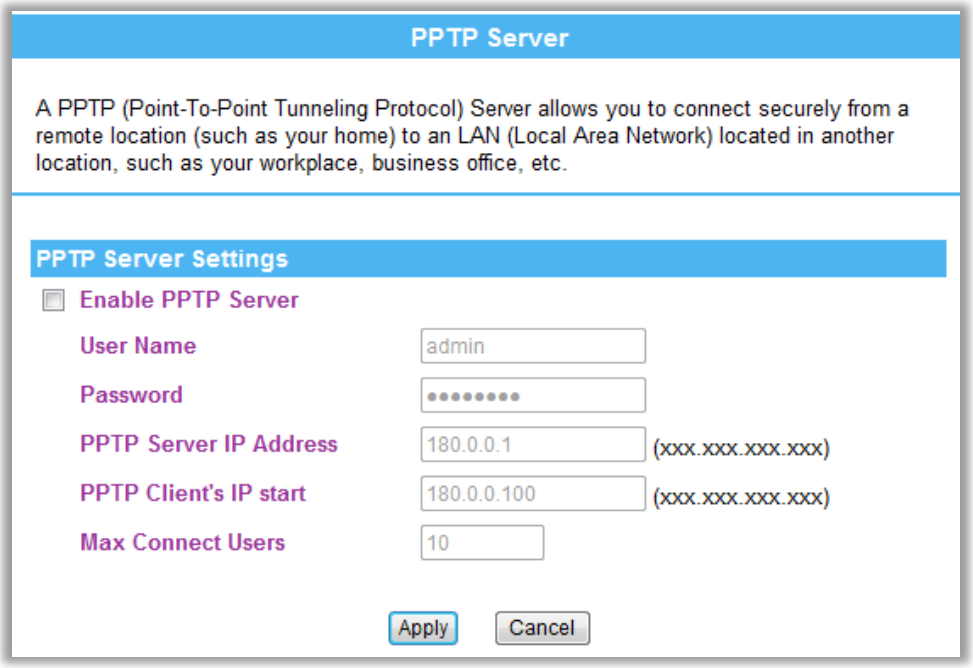
Advanced Routing

If you connect several routers with this Wireless Router, you may need to set up a predefined routing rule to have more effective network topology/traffic, this is called static route between those routers and the Wireless Router.



Item / Function	Descriptions / Instructions
Enable Dynamic Route	Check to enable the dynamic route function. **NAT:** Select to enable the network address translation function. **Transmit:** Select to use the Routing Information Protocol, the function will select the packet transmitting route that pass through least routers. **Receive:** Select to use the Routing Information Protocol, the function will select the packet receiving route that pass through least routers.
Enable Static Route	**IP address:** Enter the Gateway IP address in the field. **Subnet Mask:** Enter the Gateway subnet mask here. **Gateway:** Enter the gateway name or domain name here. **Metric:** The route with the lowest metric is the preferred route. **Interface:** Select to use **LAN** or **WAN** as the physical interface from where the packets will be sent.
Destination	The network address of the destination LAN segment. When a packet with destination IP address that matches to this field, it will route to the device set in the Route Gateway field.
Range	Select **Host** or **Net** from the pull-down menu. If select Net, please enter the **Netmask** in the following column.
IP address	Enter the Gateway IP address in the field.
Interface	You can
Comment	Enter note or remark here.
Apply	After completing the settings on this page, click **Apply** button to save the settings.
Reset	Click to discard current setting.

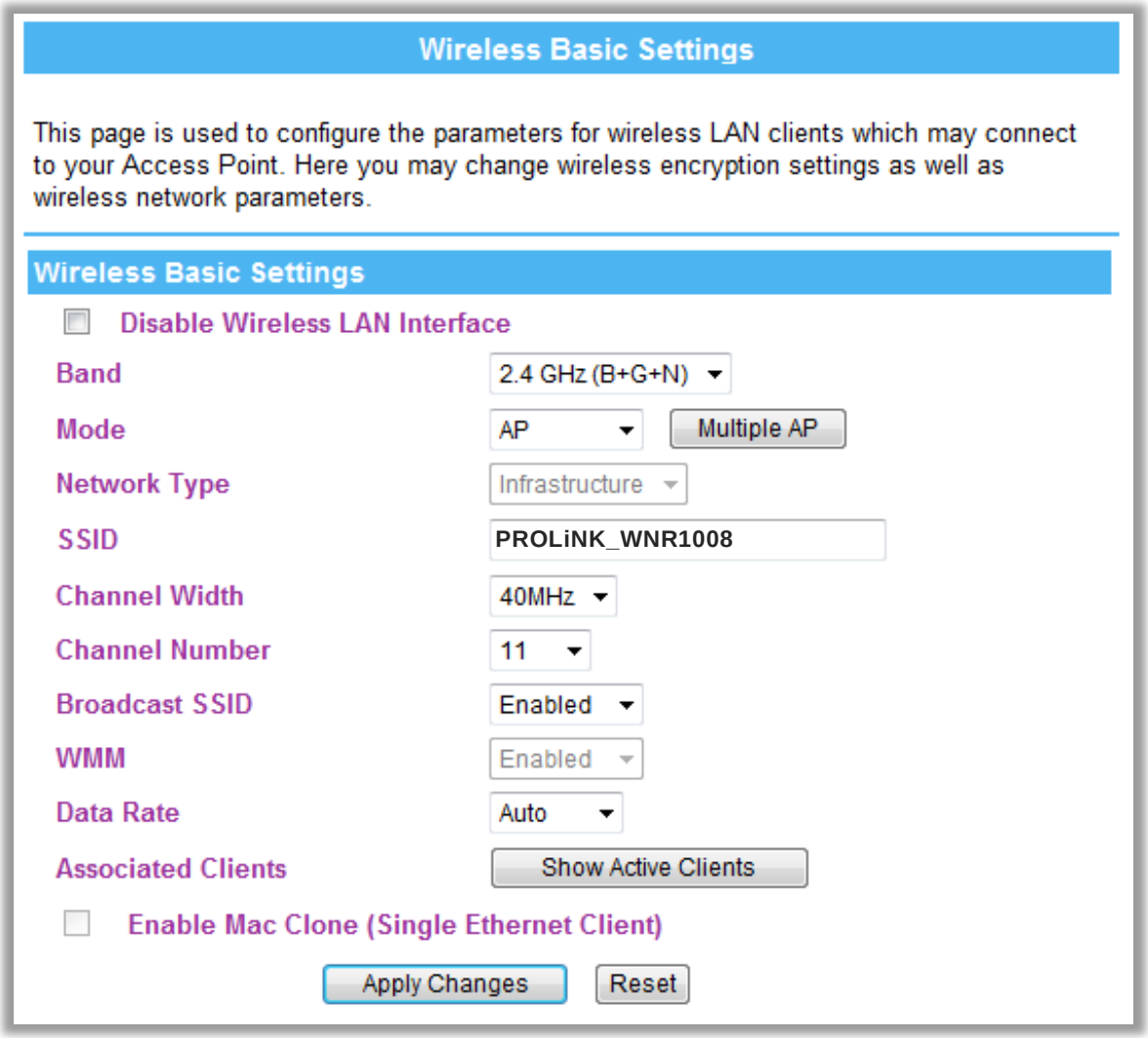
PPTP Server



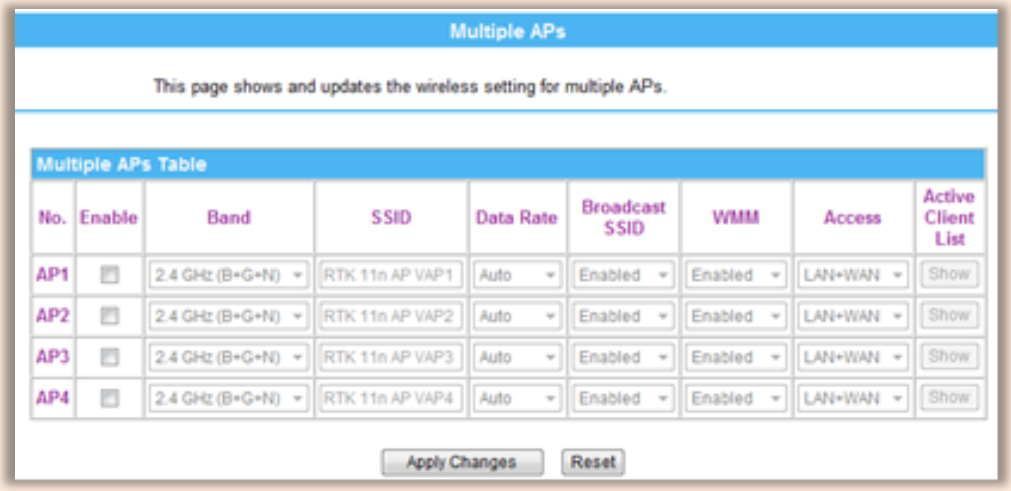
Item / Function	Descriptions / Instructions
Enable PPTP Server	Check to enable the PPTP server function, this function allows you to connect securely from a remote location (such as your home) to an LAN (Local Area Network) located in another location, such as your workplace, business office and so on.
User Name	Enter username in the column, when the PPTP client try to connect to the PPTP sever should login with the username.
Password	Setup the password in the column, when the PPTP client try to connect to the PPTP sever should login with the password.
PPTP Server IP address	Setup the PPTP server IP address here.
PPTP Client's IP Start	Setup the Client's start IP address here.
Max Connect Users	Setup the PPTP client allowed maximum here.

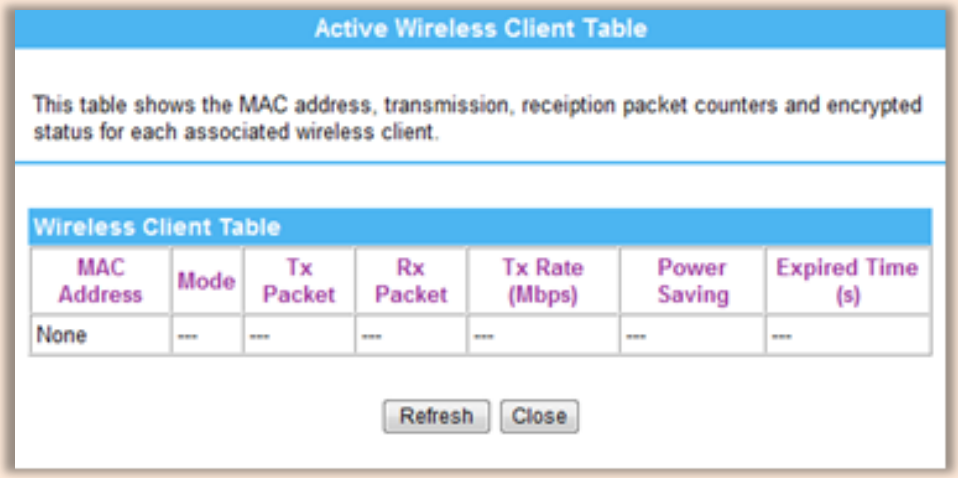
3.5. Wireless

Basic

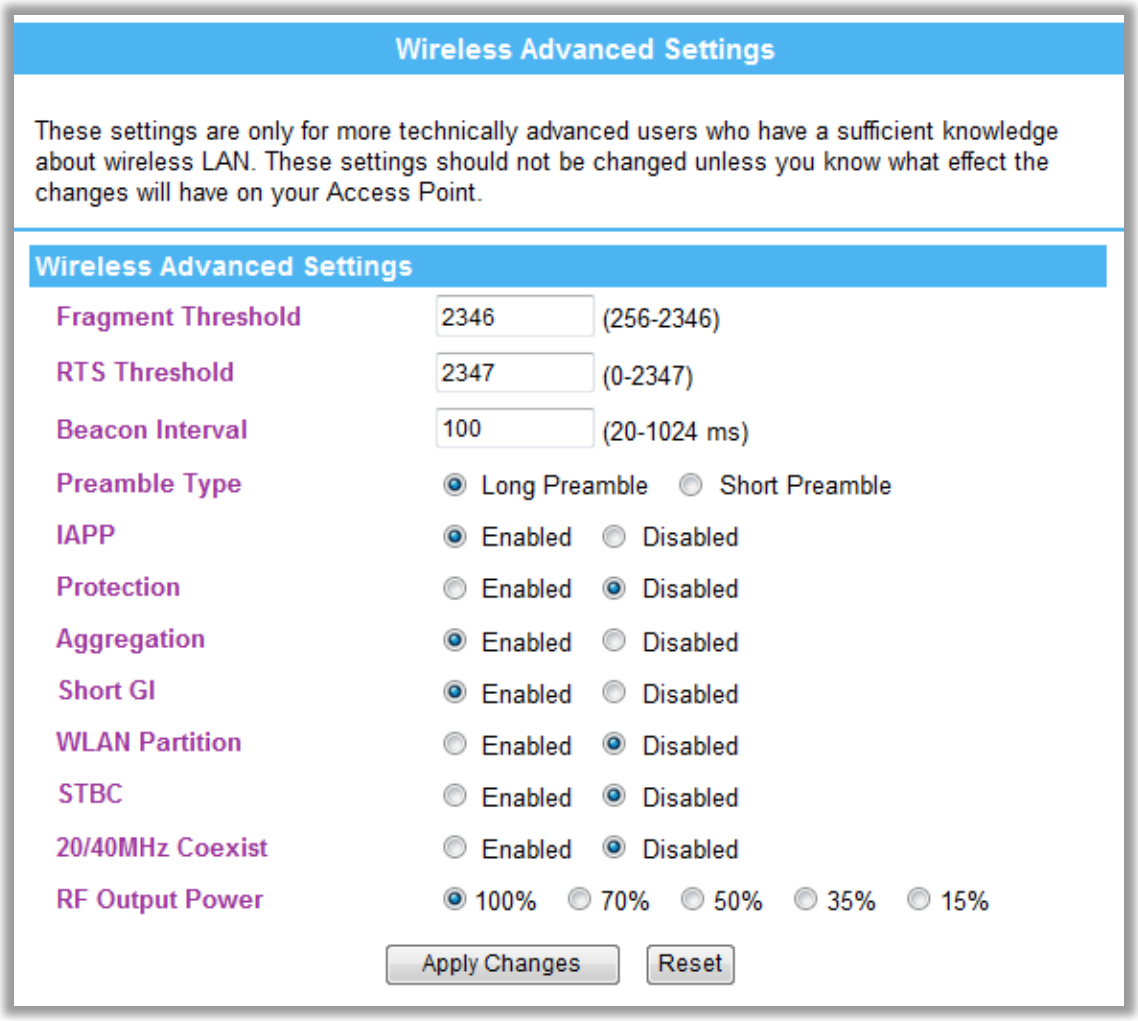


Item / Function	Descriptions / Instructions
Disable Wireless LAN Interface	Check to disable the wireless function. If the wireless LAN interface be disabled, the WLAN LED on the front LED will be off.
Band	You can choose one mode of the following you need. ● 2.4GHz (**B):** 802.11b supported rate only. ● 2.4GHz (**G):** 802.11g supported rate only. ● 2.4GHz (**N):** 802.11n supported rate only. ● 2.4GHz (**B+G):** 802.11b supported rate and 802.11g supported rate. ● 2.4GHz (**G+N):** 802.11g supported rate and 802.11n supported rate. ● 2.4GHz (**B+G+N):** 802.11b, 802.11g and 802.11n supported rate. The default is 2.4GHz (**B+G+N)** mode.
Mode	Under Router operation mode, user can select AP, WDS, and AP+WDS from the pull-down list. For AP mode, user can select AP, Client, WDS and AP+WDS mode. Under client mode, there is only Client mode can be selected. **Multiple APs** This page shows and updates the wireless setting for multiple APs.

<table>
<tr><td></td><td> 

User can set up the multiple AP here.</td></tr>
<tr><td>Network Type</td><td>If the mode be set to AP or Client mode that the network type can be set to Infrastructure or Ad hoc.</td></tr>
<tr><td>SSID</td><td>A SSID (Service Set Identifier) is referred to a network name because essentially it is a name that identifies a wireless network (case-sensitive).</td></tr>
<tr><td>Channel Width</td><td>Select 20MHz/40MHz channel width, the channel number will be form 5~11 and auto; Select 20MHz channel width the channel number will be form 1~11 and auto. Default is 20MHz/40MHz.</td></tr>
<tr><td>Channel Selection</td><td>The channel number base on the channel width you select.</td></tr>
<tr><td>Broadcast SSID</td><td>Enabled: This wireless AP will broadcast its SSID to stations.
Disabled: This wireless AP will not broadcast its SSID to stations. If stations want to connect to this wireless AP, this AP's SSID should be known in advance to make a connection.</td></tr>
<tr><td>WMM</td><td>The WiFi Multiple Media function is available under 2.4GHz (B), 2.4GHz (G) and 2.4GHz (B+G) band, and it is disabled under 2.4GHz (N), 2.4GHz (G+N) and 2.4GHz (B+G+N) band.</td></tr>
<tr><td>Data Rate</td><td>There are several data rate that you can select from the pull-down menu.</td></tr>
<tr><td>Associated Clients</td><td>Click Show Active Clients button to show all the listed active clients.
 
</td></tr>
<tr><td>Enable Mac Clone (Single Ethernet Client)</td><td>This function will be enabled under Client mode.</td></tr>
</table>

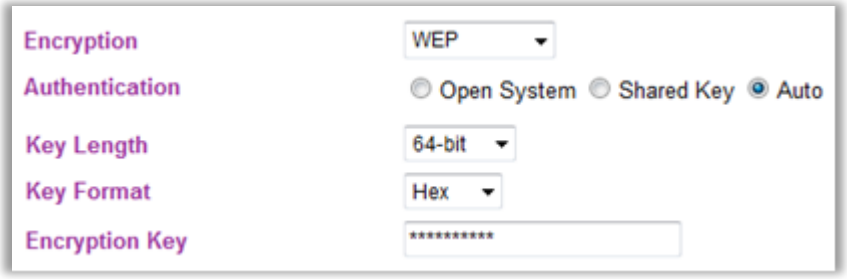
Advanced

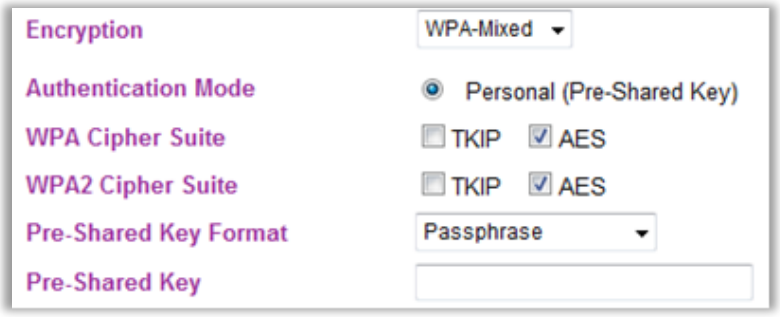

Wireless Advanced Settings
These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.
Wireless Advanced Settings
Fragment Threshold 2346 (256-2346)
RTS Threshold 2347 (0-2347)
Beacon Interval 100 (20-1024 ms)
Preamble Type Long Preamble Short Preamble
IAPP Enabled Disabled
Protection Enabled Disabled
Aggregation Enabled Disabled
Short GI Enabled Disabled
WLAN Partition Enabled Disabled
STBC Enabled Disabled
20/40MHz Coexist Enabled Disabled
RF Output Power 100% 70% 50% 35% 15%
Apply Changes
Reset

Item / Function	Descriptions / Instructions
Fragment Threshold	Fragmentation mechanism is used for improving the efficiency when high traffic flows along in the wireless network. If the 802.11g MIMO Wireless Router often transmit large files in wireless network, you can enter new Fragment Threshold value to split the packet. The value can be set from 256 to 2346. The default value is 2346.
RTS Threshold	RTS Threshold is a mechanism implemented to prevent the "Hidden Node" problem. If the "Hidden Node" problem is an issue, please specify the packet size. The RTS mechanism will be activated if the data size exceeds the value you set. Warning: Enabling RTS Threshold will cause redundant network overhead that could negatively affect the throughput performance instead of providing a remedy. This value should remain at its default setting of 2347. Should you encounter inconsistent data flow, only minor modifications of this value are recommended.
Beacon Interval	Beacon Interval is the amount of time between beacon transmissions. Before a station enters power save mode, the station needs the beacon interval to know when to wake up to receive the beacon. Range 20-1024 ms, default is 100.
Preamble Type	A preamble is a signal used in wireless environment to synchronize the transmitting timing including Synchronization and Start frame delimiter. You can select Long or Short for the preamble type.
IAPP	Select Enabled or Disabled to execute this function.
Protection	Select Enabled or Disabled to execute the security function.
Aggregation	Select Enabled or Disabled to execute this function.
Short GI	Select Enabled or Disabled to execute this function.
WLAN Partition	Select Enabled or Disabled to execute this function.
STBC	Select Enabled or Disabled to execute this function.
20/40MHz Coexist	Select Enabled or Disabled to execute this function.
RF Output Power	Select the transmitting power rate 100%, 70%, 50%, 35%, 15%.

Security

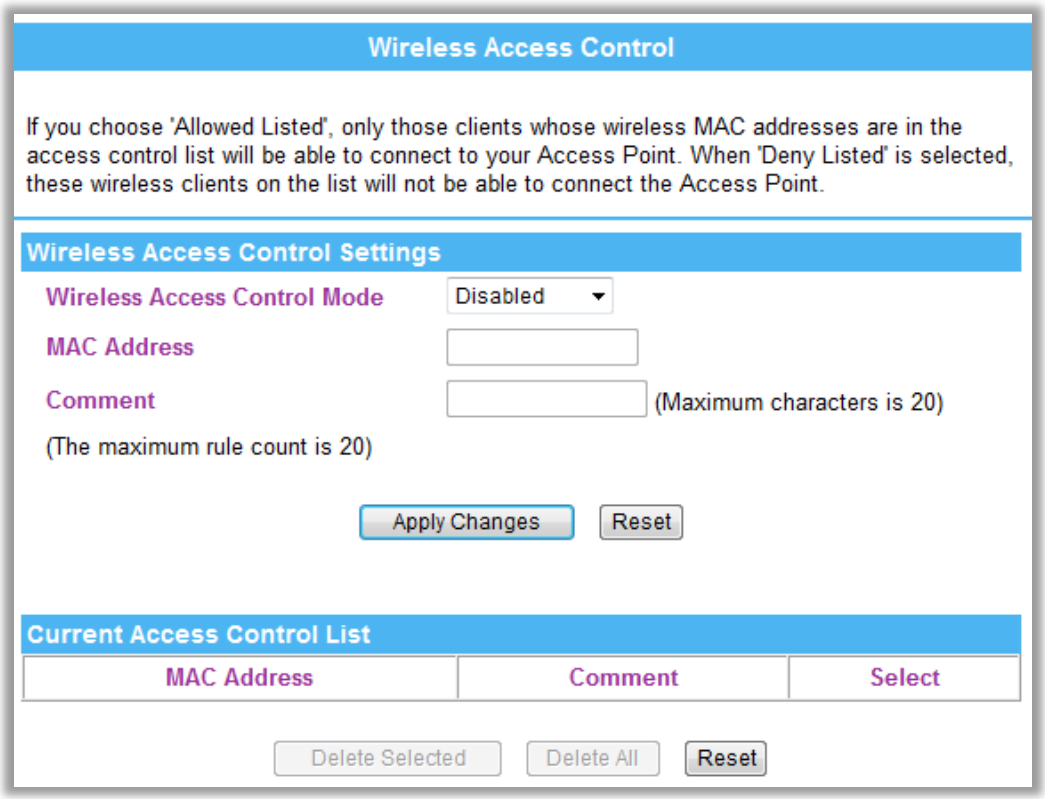
Wireless Security Setup
This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
Secutity Settings
Select SSID
PROLiNK_WNR1008
Apply Changes
Reset
Encryption
Disabled

Item / Function	Descriptions / Instructions
Select SSID	Select SSID (Service Set Identifier) to set up the security form the pull-down list.
Encryption	There are several type of encryption modes including **Disabled**, **WEP (Open System), WEP (Shared Key), WEP (AUTO), WPA (Personal), WPA2 (Personal)**, and **WPA-Mixed**. The security default setting is Disabled. It is strongly recommended to set up security mode to prevent any unauthorized accessing. **Note:** ➢ AUTO (Open/Shared) means AP can accept client (station) to connect to it by using OPEN-WEP or SHARED-WEP. **WEP**  **Authentication:** Select Open System, Shared Key or Auto. **Key Length:** select key length 64-bit or 128-bit. **Key Format:** ● **Hexadecimal (WEP 64 bits):** 10 Hex characters (0~9, a~f). ● **Hexadecimal (WEP 128 bits):** 26 Hex characters (0~9, a~f). ● **ASCII (WEP 64 bits):** 5 ASCII characters (case-sensitive). ● **ASCII (WEP 128 bits):** 13 ASCII characters (case-sensitive). **Encryption Key:** Enter the key in the key setting field. **WPA-PSK/ WPA2-PSK/ WPA-PSK WPA2-PSK**



Authentication Mode: Select Enterprise (RADIUS) or Personal (Pre-Shared Key) mode.
WPA Cipher Suite: here supported AES only.
WPA2 Cipher Suite: here supported AES only.
Pre-Shared Key Format: There are two formats for choice to set the Pre-shared key, **Passphrase** and **Hex (64 characters)**. If **Hex** is selected, users will have to enter a 64 characters string. For easier configuration, the **Passphrase (**at least 8 characters) format is recommended.
Pre-Shared Key : Pre-Shared Key serves as a password. Users may key in 8 to 63 characters string if you selected passphrase. Pre-shared key format to set the passwords or leave it blank, in which the 802.1x Authentication will be activated. Make sure the same password is used on client's end.

ACL


Wireless Access Control
If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
Wireless Access Control Settings
Wireless Access Control Mode
Disabled
MAC Address
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current Access Control List
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

Item / Function	Descriptions / Instructions
Wireless Access Control Mode	Select **Allow Listed** or **Deny Listed** form the pull-down menu to enable access control function. Default setting is **Disabled**.
MAC Address	Enter the MAC address (12 characters) of a station that is allowed to access this Access Point.
Comment	You may enter up to 20 characters as a remark to the previous MAC address.
Current Access Control List	This table displays you the station MAC information.
Delete Selected	Click **Delete Selected** to delete items which are selected.
Delete All	Click **Delete All** to delete all the items.
Reset	Click **Reset** to rest.

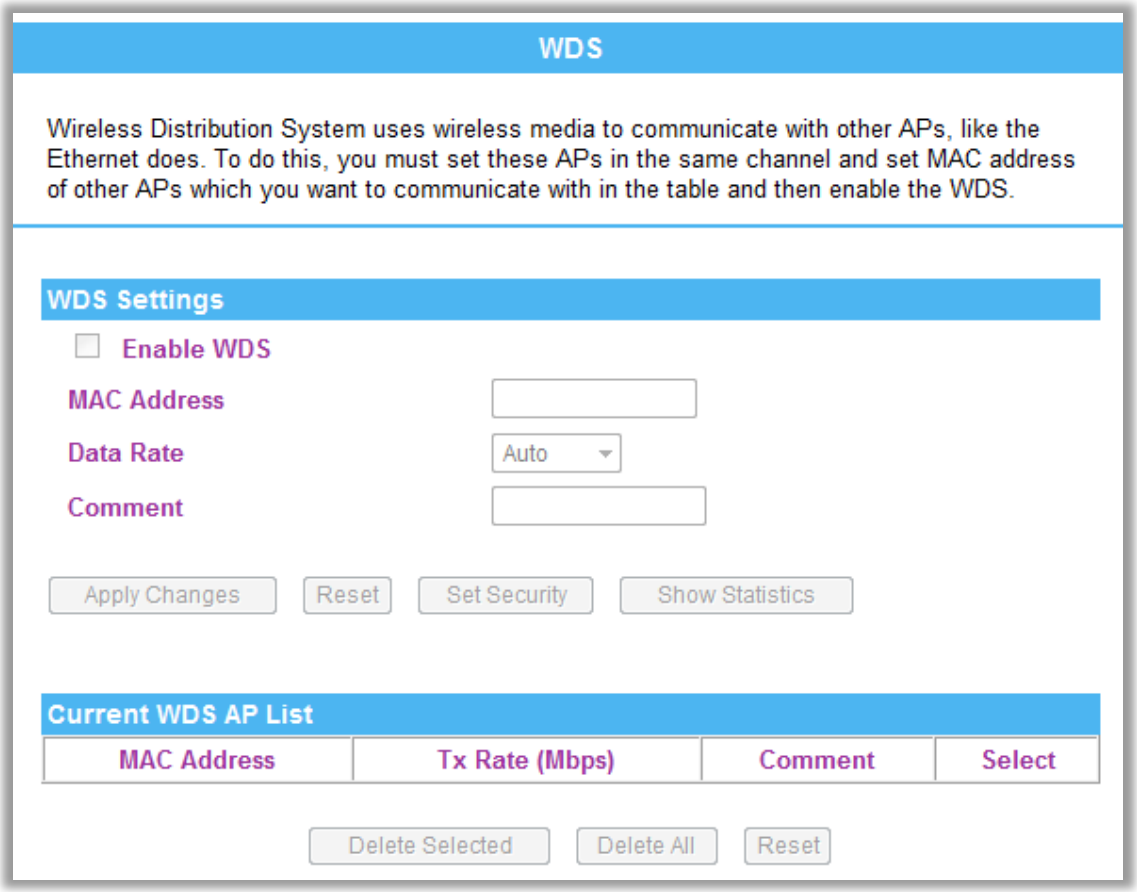
WDS

Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.

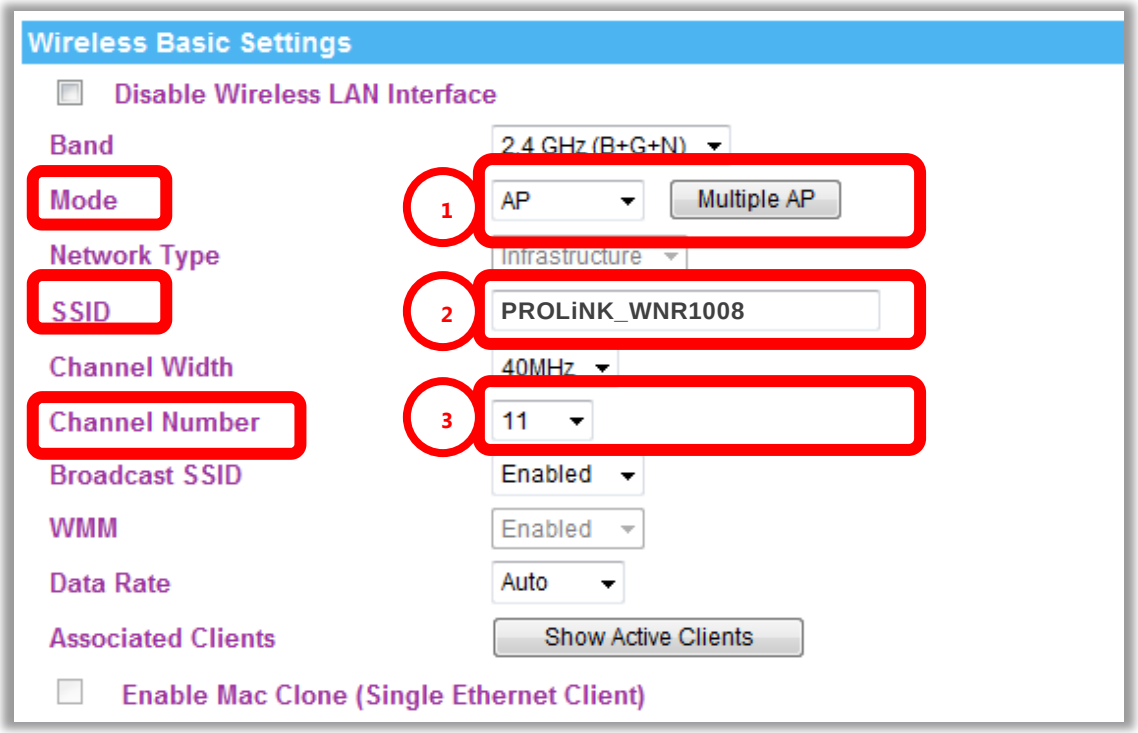
To use WDS function:

1. The APs must support WDS function.
2. To set the same SSID (Network name).
3. The channel must be set to the same on the APs.
4. To set the same Wireless MAC address (BSSID) on the APs.
5. To set same security (WEP or WPA) on the APs.

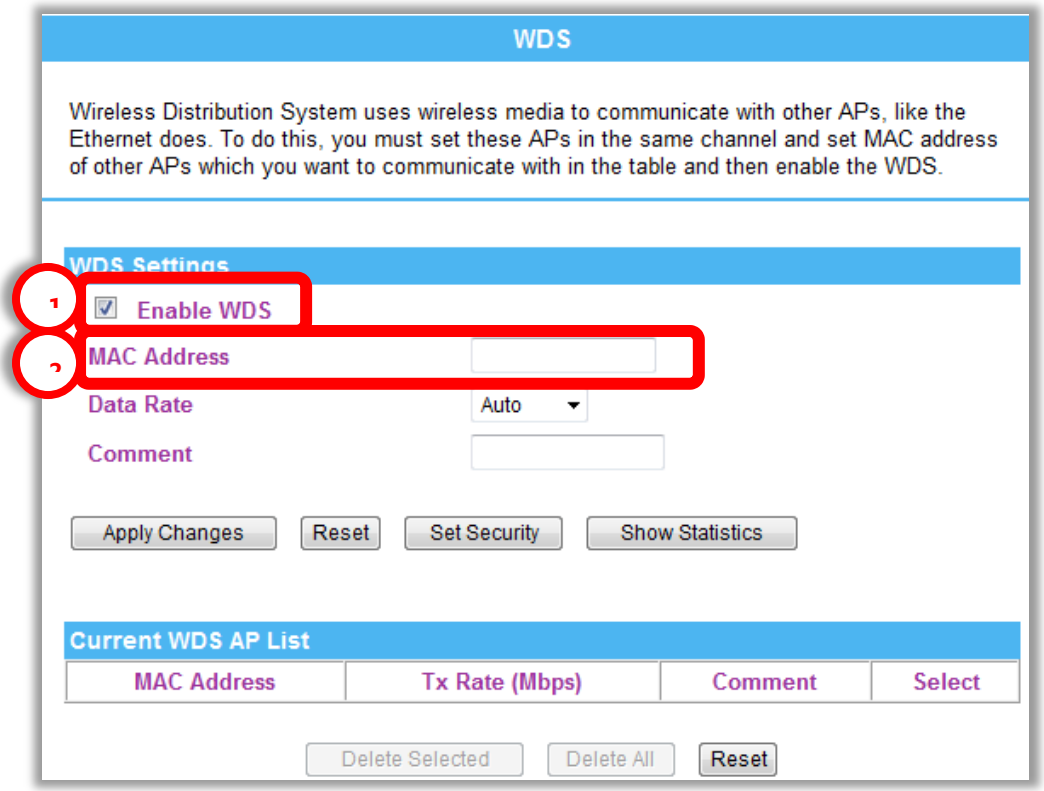
Note: To setup WDS must use the same wireless products (the same model will be better); due to different wireless products might support different WDS settings. Thus, it is suggested that to use the same wireless products that support WDS function.


WDS
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
WDS Settings
Enable WDS
MAC Address
Data Rate
Auto
Comment
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

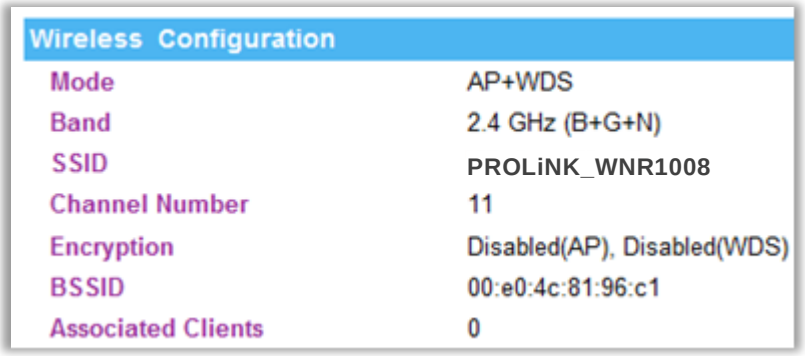
Step 1. Users would like to set up the WDS function, please go to **Wireless > Basic** page to set up the mode into **WDS** or **AP+ WDS** (Repeater) mode, and set the APs into the same **Network Name (SSID)** and **Channel (**If set to WDS mode, the SSID do not need to change). After setting up, please click **Apply Changes** button to execute.

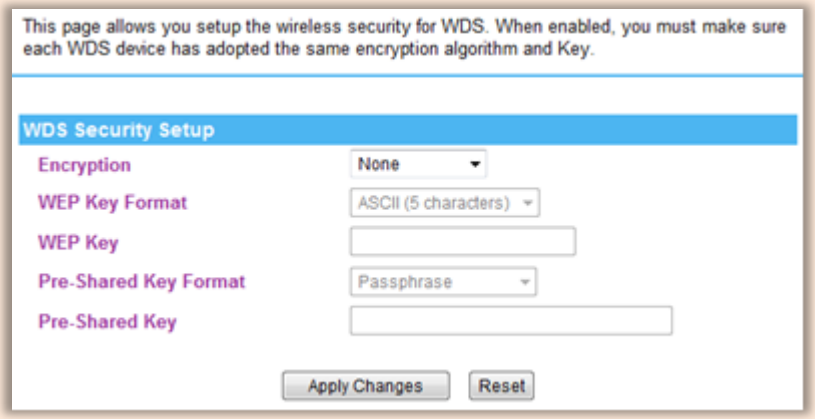
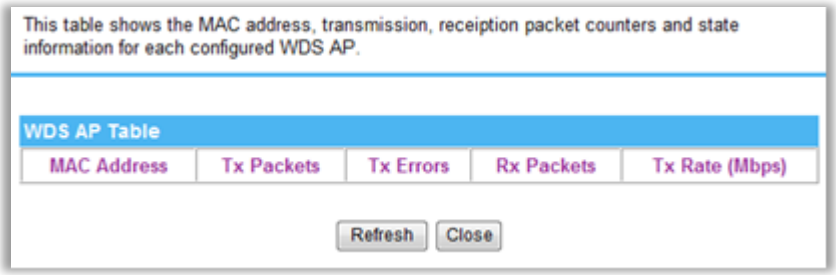


Step 2. Then go to **Wireless > WDS** page to (1) enable the WDS function and (2) enter APs **Wireless MAC address** (please go to **Status> Wireless Configuration** to make sure the **BSSID**) to each other to make the WDS connection. Please click **Apply** button to execute.


WDS
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
WDS Settings
Enable WDS
MAC Address
Data Rate
Auto
Comment
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

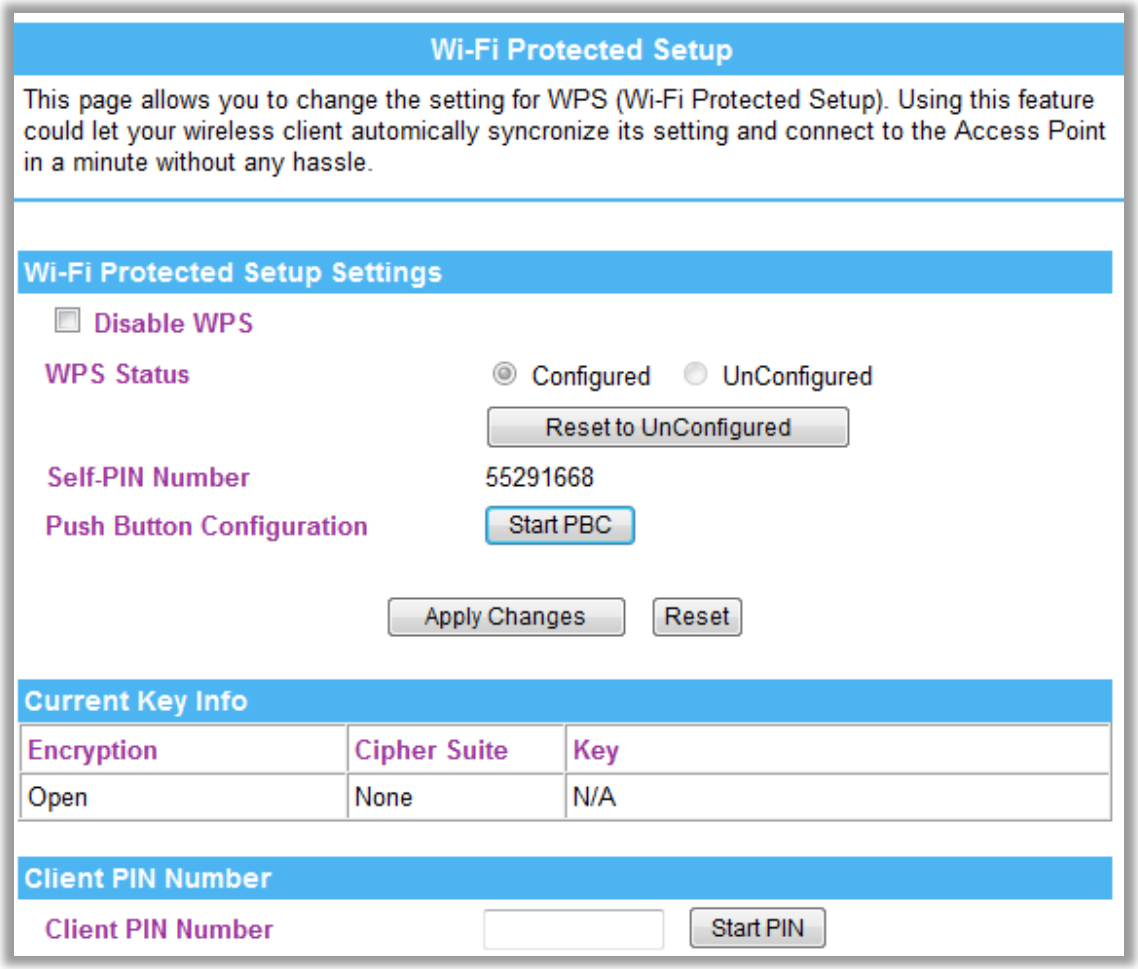
Item / Function	Descriptions / Instructions
Enable WDS	Check the box to enable the WDS function.
MAC Address	**MAC Address**: Enter the Wireless BSSID (MAC) 12 characters of the wireless AP that you want to connect with. To check your wireless router's MAC address, please go to **Status** > **Wireless Configuration** to find your **BSSID** (Wireless MAC address.)



Data Rate	Select the data rate form the pull-down list.
Comment	Enter a description for the device.
Apply Changes	After completing the settings on this page, click **Apply changes** button to save the settings.
Reset	Click **Reset** to restore to default values.
Set Security	Enable the WDS function and then click **Set Security** button to set up the WDS security.  **Encryption:** Select the encryption type **None, WEP 64 bits, WEP 128 bits,** and **WPA2 (AES)** from the pull-down menu. **WEP Key Format:** For **WEP 64 bits** and **WEP 128 bits** encryption type, the selection of **WEP Key Format** are **Hex** and **ASCII**. **WEP Key**: If select Hex if you are using hexadecimal numbers (0-9, or A-F). Select ASCII if you are using ASCII characters (case-sensitive). ● **Hexadecimal (WEP 64 bits):** 10 Hex characters (0~9, a~f). ● **Hexadecimal (WEP 128 bits):** 26 Hex characters (0~9, a~f). ● **ASCII (WEP 64 bits):** 5 ASCII characters (case-sensitive). ● **ASCII (WEP 128 bits):** 13 ASCII characters (case-sensitive). **Pre-Shared Key Format**: The **Pre-shared Key Format** will be enabled when **WPA (TKIP)** and **WPA2 (AES)** encryption be selected. There are two formats for choice to set the Pre-shared key, **Passphrase** and **Hex (64 characters)**. If **Hex** is selected, users will have to enter a 64 characters string. For easier configuration, the **Passphrase (**at least 8 characters) format is recommended. **Pre-Shared Key:** Pre-Shared-Key serves as a password. Users may key in 8 to 63 characters string to set the passwords or leave it blank, in which the 802.1x Authentication will be activated. Make sure the same password is used on client's end.
Show Statistics	Click to show the current WDS AP table. This table shows the MAC address, transmission packets and errors, reception packets and Tx Rate (Mbps) counters for each configured WDS AP. 

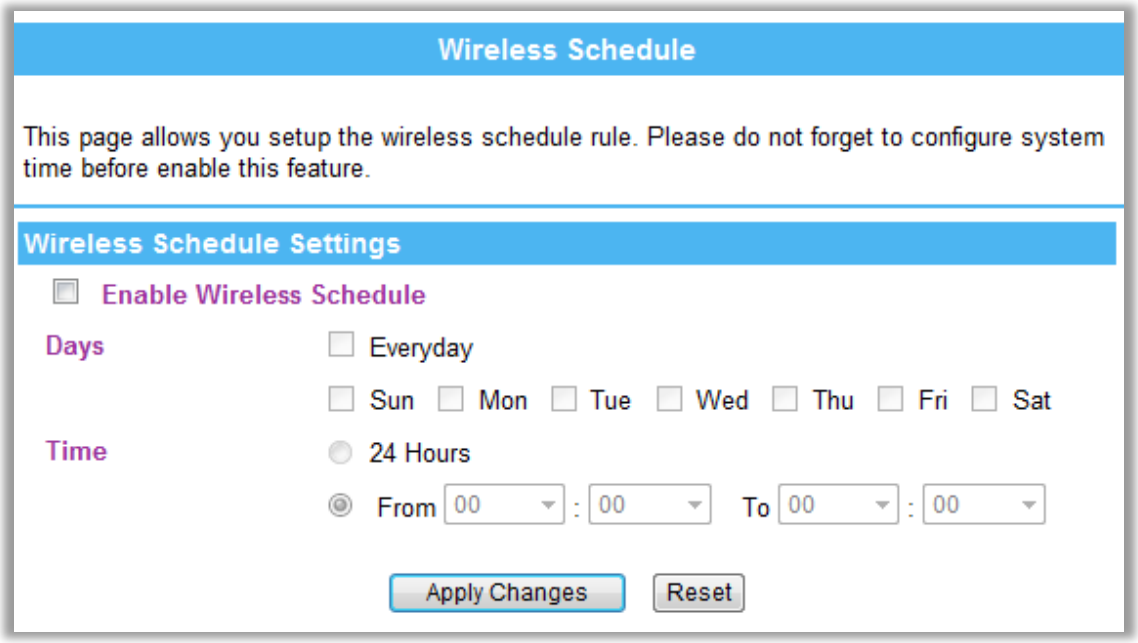
	Refresh: Click to renew the counters information. **Close**: Click to leave the screen.
Current WDS AP List	Here shows the current WDS AP information.
Delete Selected	Click **Delete Selected** to delete the selected AP information.
Delete All	Click **Delete All** to delete all the items.
Reset	Click **Reset** to restore the settings.

WPS



Item / Function	Descriptions / Instructions
Disable WPS	Check the box to disable the WPS function, default setting is enabled.
WPS Status	Here shows the current status of the WPS function. Default setting is Configured, click **Reset to Unconfigured** to re-configured the WPS connection.
Self-PIN Number	Here shows the 8 characters PIN code of the router itself.
Push Button Configuration	Click **Start PBC** button to make a WPS connection with client.
Client PIN Number	Enter the client PIN code into the blank field then click the **Start PIN** button to make a WPS connection with client.

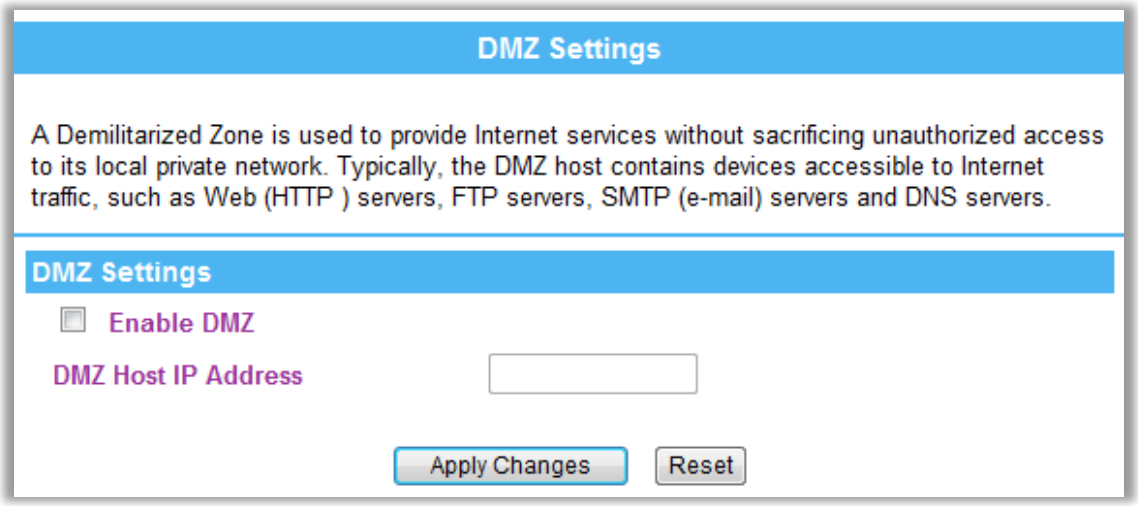
Schedule


Wireless Schedule
This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.
Wireless Schedule Settings
Enable Wireless Schedule
Days
Everyday
Sun Mon Tue Wed Thu Fri Sat
Time
24 Hours
From 00 : 00 To 00 : 00
Apply Changes
Reset

Item / Function	Descriptions / Instructions
Enable Wireless Schedule	Check the box to enable the schedule function. Set up the time to schedule the wireless access rule. Select the day and time you want to enable the wireless function.

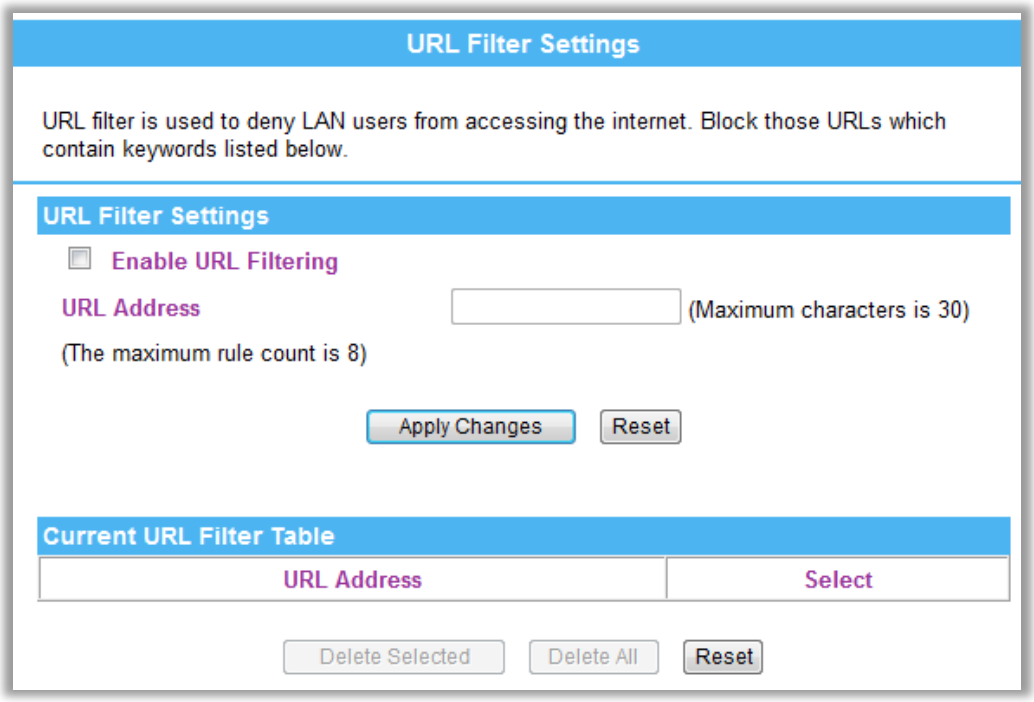
3.6. Firewall

DMZ Settings


DMZ Settings
A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.
DMZ Settings
Enable DMZ
DMZ Host IP Address
Apply Changes
Reset

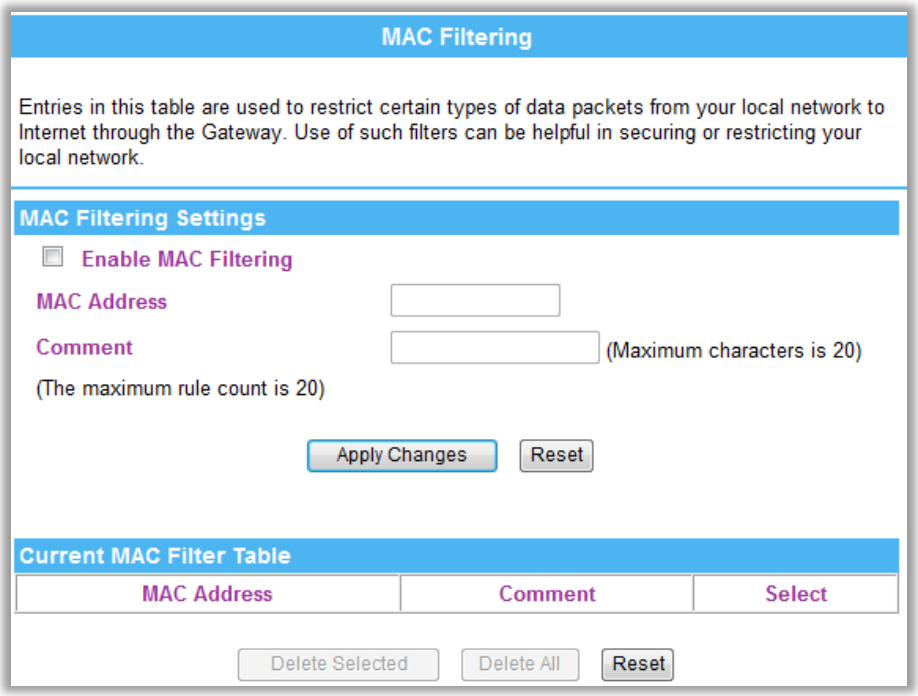
Item / Function	Descriptions / Instructions
Enable DMZ	Check the box to enable DMZ function. If the DMZ Host Function is enabled, it means that you set up DMZ host at a particular computer to be exposed to the Internet so that some applications/software, especially Internet / online game can have two way connections.
DMZ Host IP Address	Enter the IP address of a particular host in your LAN which will receive all the packets originally going to the WAN port/Public IP address above. **Note:** You need to give your LAN PC clients a fixed/static IP address for DMZ to work properly.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save the settings.
Reset	Click **Reset** button to restore to default values.

URL Filter Settings



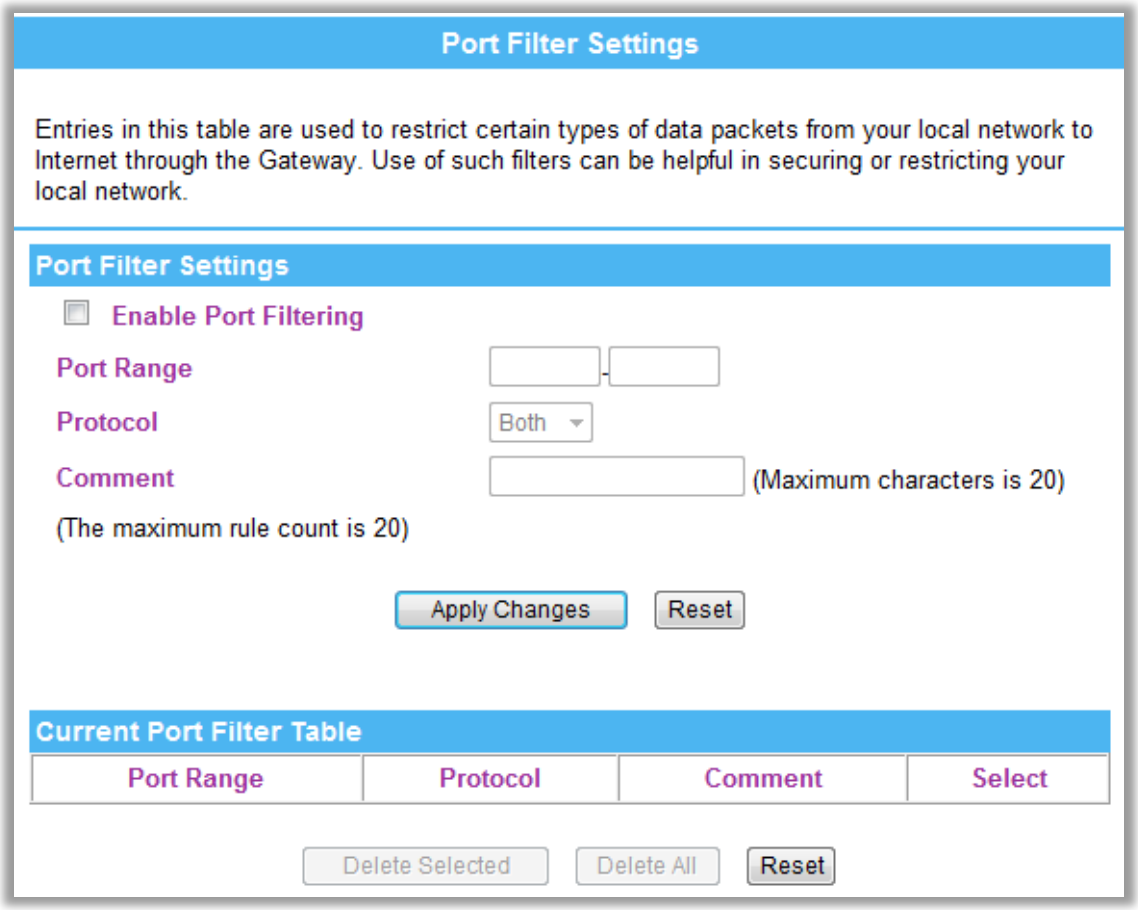
Item / Function	Descriptions / Instructions
Enable URL Filtering	Check to enable URL filtering function.
URL Address	Enter the **URL address** in the field.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save the settings.
Reset	Click **Reset** button to restore to default values.
Current Filter Table	Shows the current URL address filter information.
Delete Selected	Click **Delete Selected** button to delete items which are selected.
Delete All	Click **Delete All** button to delete all the items.
Reset	Click **Reset** button to rest.

MAC Filtering


MAC Filtering
Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
MAC Filtering Settings
Enable MAC Filtering
MAC Address
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current MAC Filter Table
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

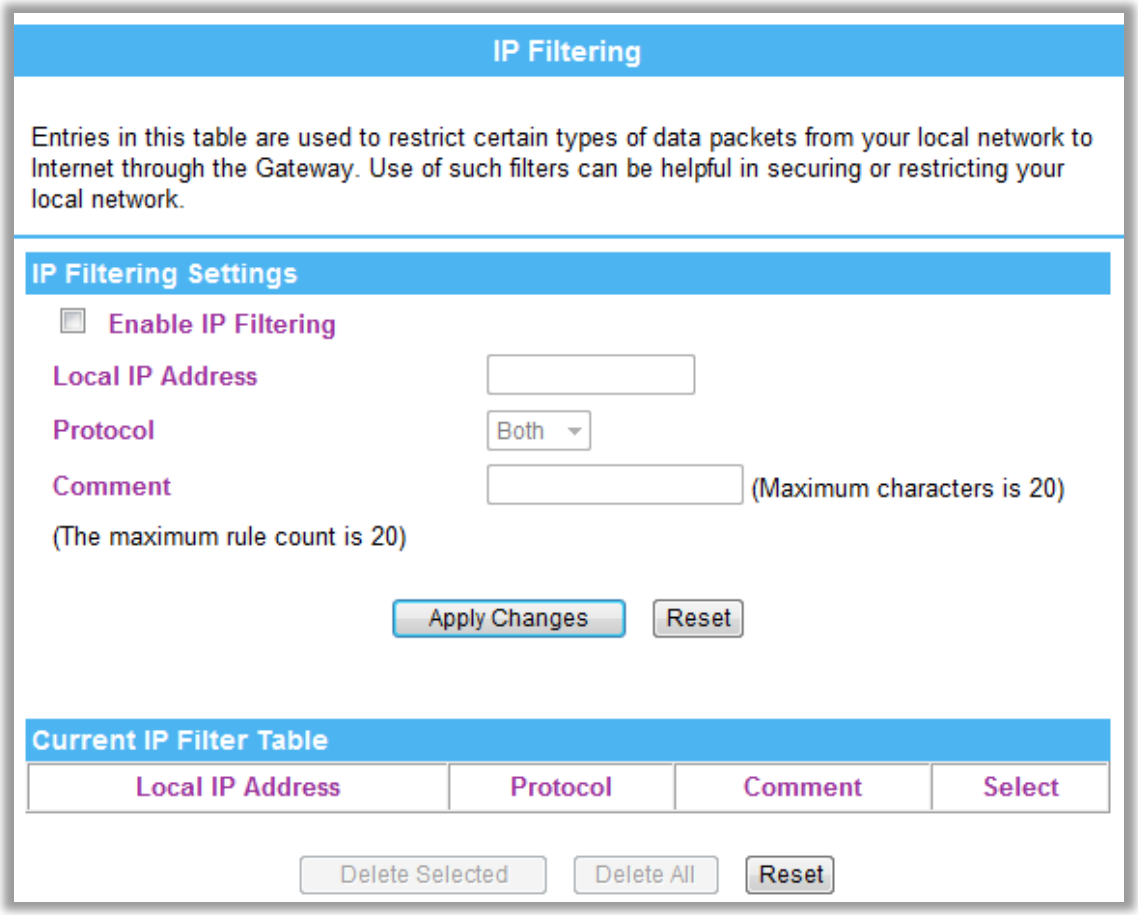
Item / Function	Descriptions / Instructions
Enable MAC Filtering	Check to enable MAC filtering function.
MAC Address	Enter the client MAC address in the field.
Comment	You may key in a description MAC address.
Apply Changes	After completing the settings on this page, click Apply Changes button to save the settings.
Reset	Click **Reset** button to restore to default values.
Current Filter Table	Shows the current MAC filter information.
Delete Selected	Click **Delete Selected** button to delete items which are selected.
Delete All	Click **Delete All** button to delete all the items.
Reset	Click **Reset** button to rest.

Port Filtering Settings



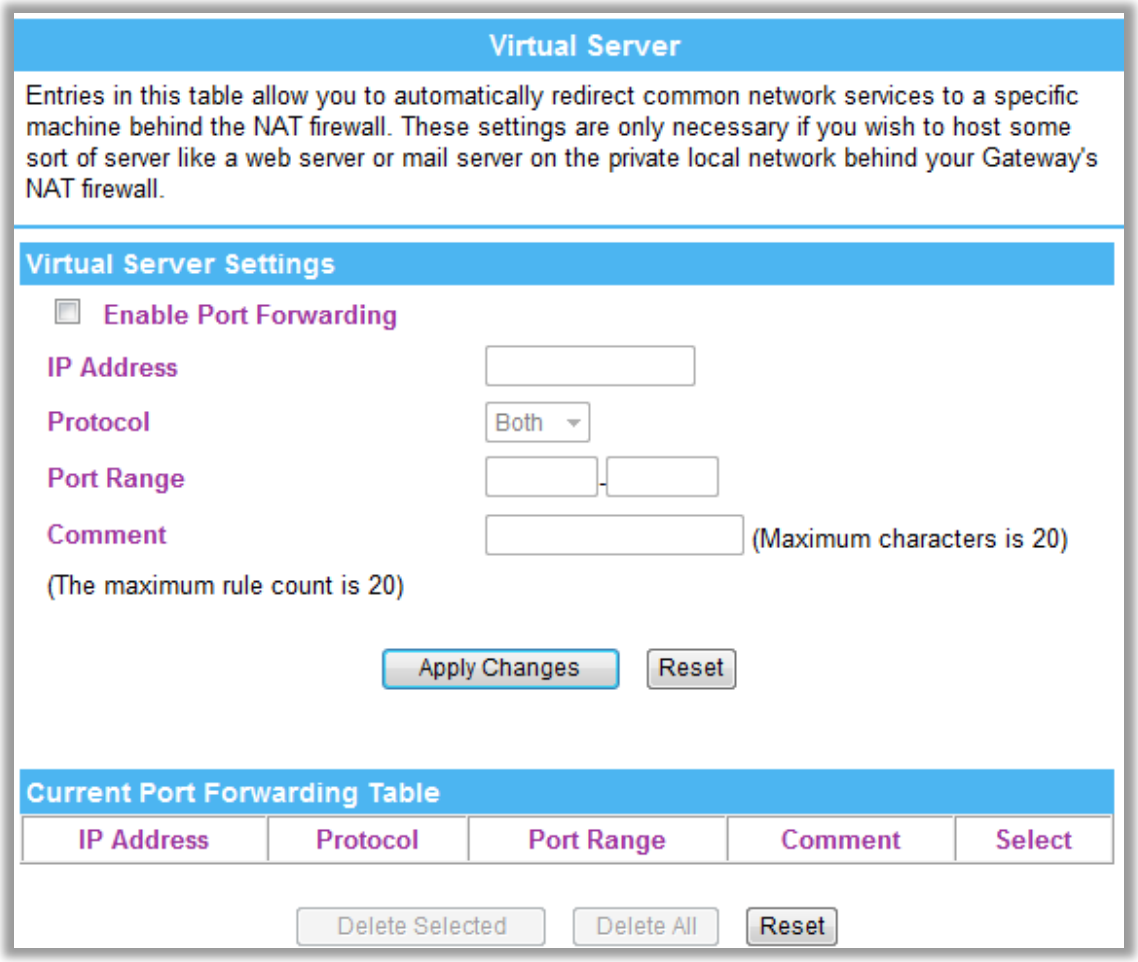
Item / Function	Descriptions / Instructions
Enable Port Filtering	Check to enable Port Filtering function.
Port Range	Enter the beginning of the range of port numbers used by the service. If the service uses a single port number, enter it in both the start and finish fields.
Protocol	Select the protocol (TCP, UDP or Both) used to the remote system or service.
Comment	You may key in a description MAC address.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save the settings.
Reset	Click **Reset** button to restore to default values.
Current Port Forwarding Table	Shows the current Port Forwarding information.
Delete Selected	Click **Delete Selected** button to delete items which are selected.
Delete All	Click **Delete All** button to delete all the items.
Reset	Click **Reset** button to rest.

IP Filtering



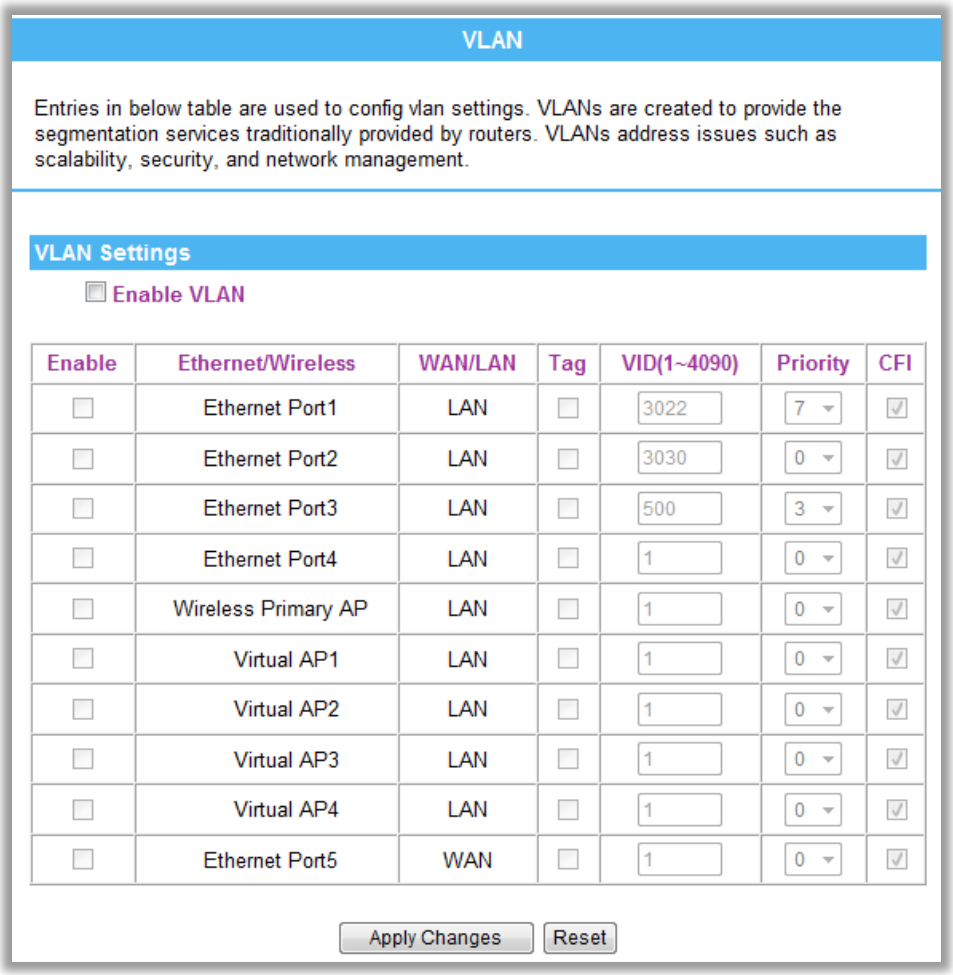
Item / Function	Descriptions / Instructions
Enable IP Filtering	Check to enable IP filtering function.
Local IP Address	Enter the local server's IP address.
Protocol	Select the protocol (TCP, UDP or Both) used to the remote system or service.
Comment	You may key in a description for the port range.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save the settings.
Reset	Click **Reset** button to restore to default values.
Current Filter Table	Shows the current IP filter information.
Delete Selected	Click **Delete Selected** button to delete items which are selected.
Delete All	Click **Delete All** button to delete all the items.
Reset	Click **Reset** button to rest.

Virtual Server


Virtual Server
Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.
Virtual Server Settings
Enable Port Forwarding
IP Address
Protocol
Both
Port Range
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current Port Forwarding Table
IP Address
Protocol
Port Range
Comment
Select
Delete Selected
Delete All
Reset

Item / Function	Descriptions / Instructions
Enable Port Forwarding	Check to enable Port Forwarding function.
IP Address	Enter the IP address in the field.
Protocol	Select the protocol (TCP, UDP or Both) used to the remote system or service.
Port Range	For TCP and UDP Services, enter the beginning of the range of port numbers used by the service. If the service uses a single port number, enter it in both the start and finish fields.
Comment	You may key in a description MAC address.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save the settings.
Reset	Click **Reset** button to restore to default values.
Current Port Forwarding Table	Shows the current Port Forwarding information.
Delete Selected	Click **Delete Selected** button to delete items which are selected.
Delete All	Click **Delete All** button to delete all the items.
Reset	Click **Reset** button to rest.

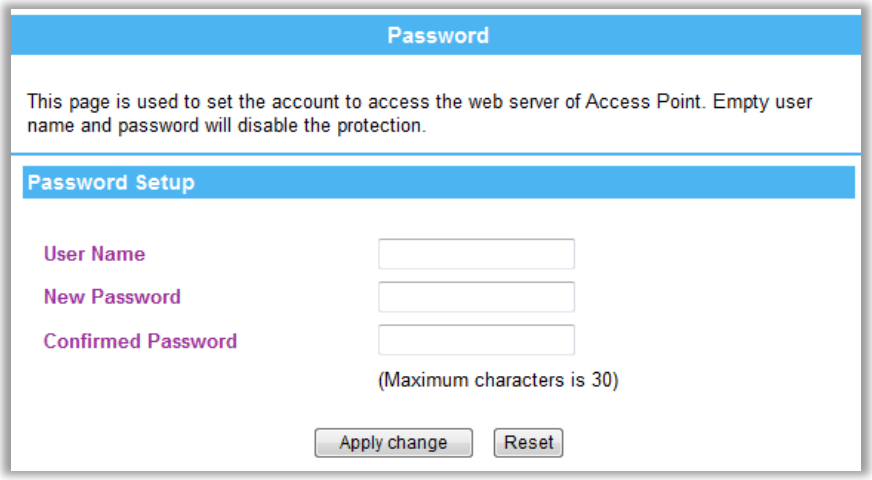
VLAN


VLAN
Entries in below table are used to config vlan settings. VLANs are created to provide the segmentation services traditionally provided by routers. VLANs address issues such as scalability, security, and network management.
VLAN Settings
Enable VLAN
Enable
Ethernet/Wireless
WAN/LAN
Tag
VID(1~4090)
Priority
CFI
Ethernet Port1 LAN 3022 7
Ethernet Port2 LAN 3030 0
Ethernet Port3 LAN 500 3
Ethernet Port4 LAN 1 0
Wireless Primary AP LAN 1 0
Virtual AP1 LAN 1 0
Virtual AP2 LAN 1 0
Virtual AP3 LAN 1 0
Virtual AP4 LAN 1 0
Ethernet Port5 WAN 1 0
Apply Changes
Reset

Item / Function	Descriptions / Instructions
Enable VLAN	Entries in below table are used to config VLAN settings. VLANs are created to provide the segmentation services traditionally provided by routers. VLANs address issues such as scalability, security, and network management.

3.7. Administration

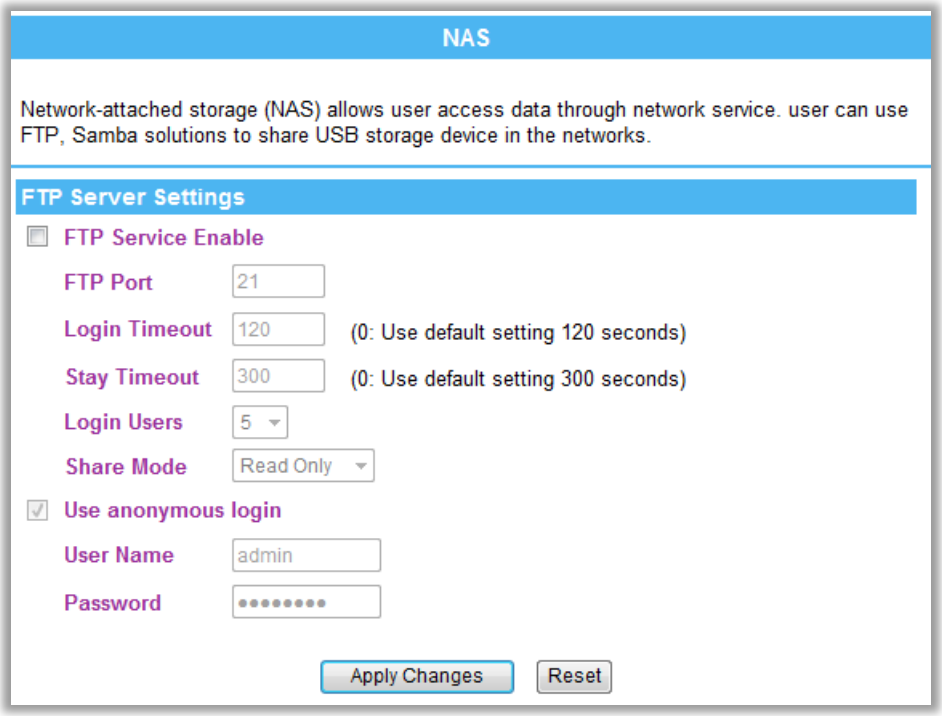
Password


Password
This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.
Password Setup
User Name
New Password
Confirmed Password
(Maximum characters is 30)
Apply change
Reset

Item / Function	Descriptions / Instructions
User Name	To set up the login username to protect the Wireless Router configuration accessing via web browser. Empty user

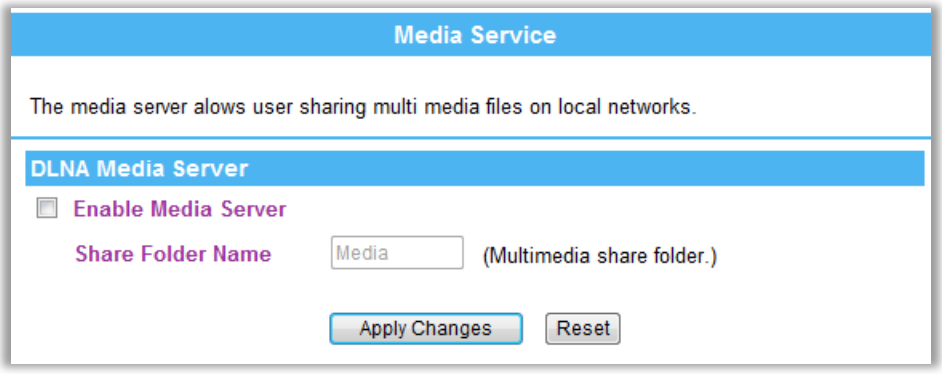
	name and password will disable the protection. It's strongly recommended to assign a set of password for further security.
New Password	To set up the login password to protect the Wireless Router configuration accessing via web browser. Maximum input is 30 alphanumeric characters (case sensitive.)
Confirmed Password	Key in the password again to confirm.

NAS



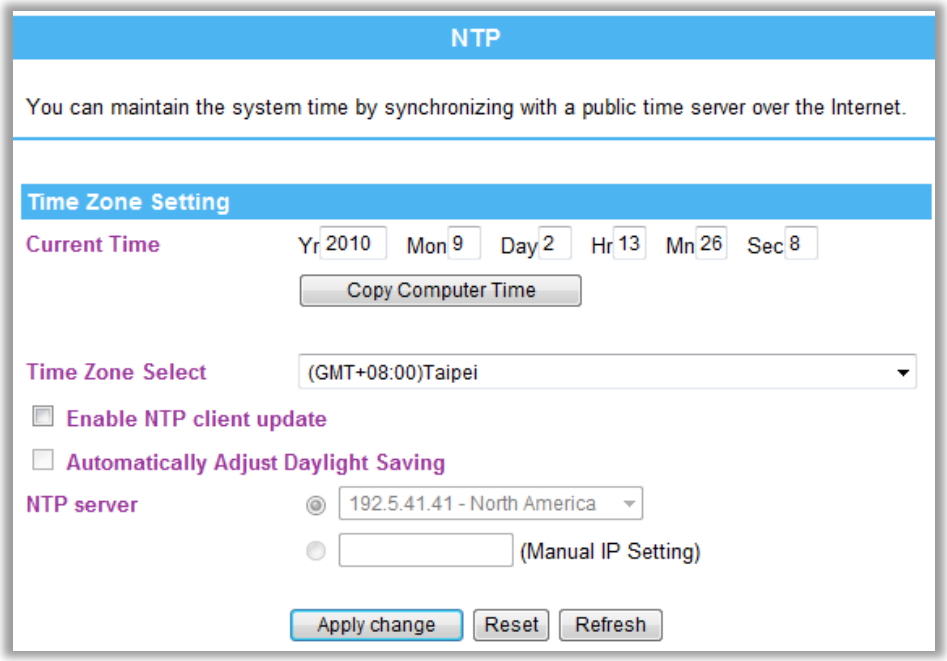
Item / Function	Descriptions / Instructions
FTP Service Enable	Network attached storage (NAS) allows user access data through network service. User can use FTP, Samba solutions to share USB storage device in the networks.
FTP Port	Enter the FTP port here.
Login Timeout	Setup the login time limit seconds here.
Stay Timeout	Setup the login stay time limit seconds here.
Login Users	Setup the login user limit numbers here.
Share Mode	To control the data authentication for login user.
Use anonymous login	Do not need to login with a s username or password. If you do not want to use anonymous login, please enter the user name and password in the field.

Media Share



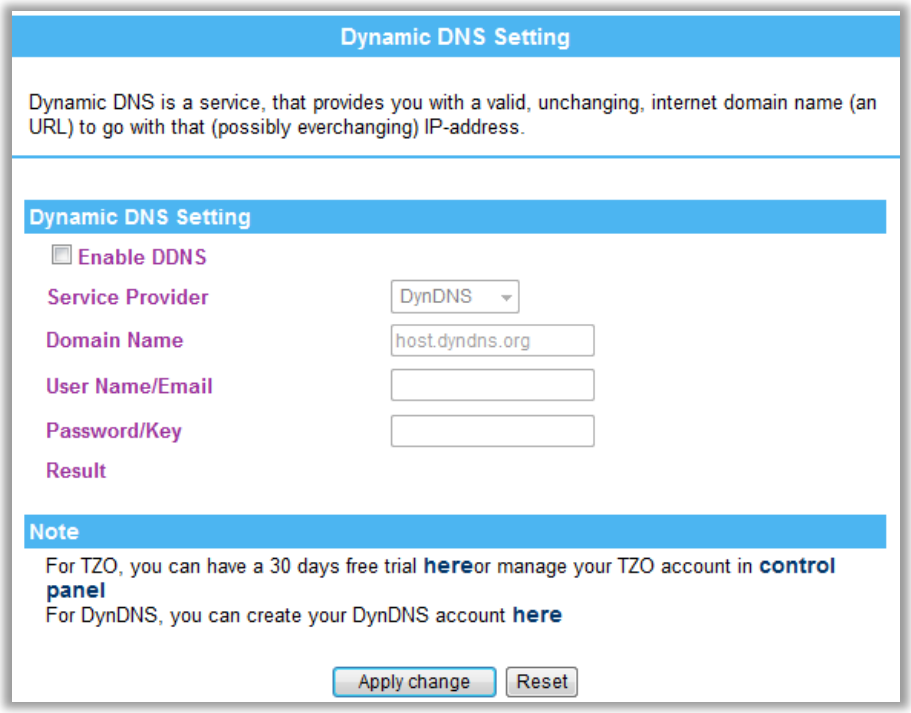
Item / Function	Descriptions / Instructions
Enable Media Server	The media server allows user sharing multi-media files on local networks.
Share Folder Name	Enter the file name that shared on the local area network here.

NTP



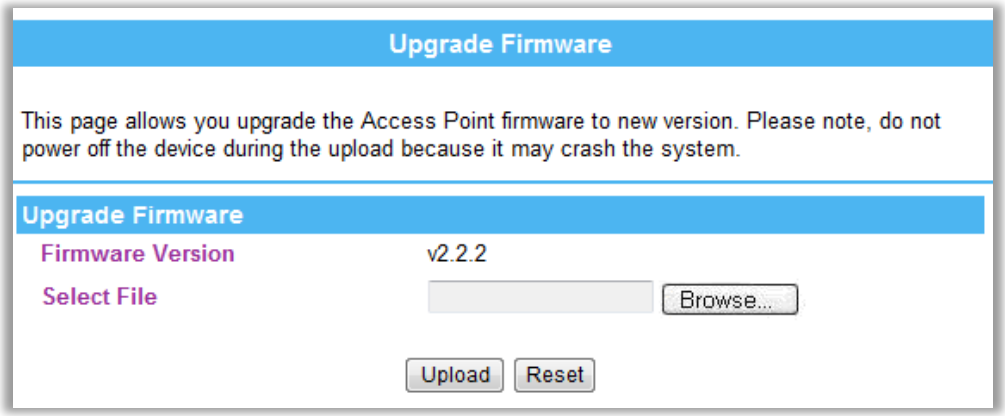
Item / Function	Descriptions / Instructions
Current Time	Enter the current time of this wireless router or click the **Copy Computer Time** button to synchronize the time with the connected computer automatically.
Time Zone Select	Select the local time zone from the pull-down menu.
Enable NTP client update	Check to enable **NTP (**Network Time Protocol Server) **client update** function.
Automatically Adjust Daylight Saving	Check the box to enable this function.
NTP server Manual IP setting	You may choose to select NTP server from the pull-down menu or enter an IP address of a specific server manually.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save current settings.
Refresh	Click **Refresh** button to renew current time.

Dynamic DNS Setting


Dynamic DNS Setting
Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.
Dynamic DNS Setting
Enable DDNS
Service Provider
DynDNS
Domain Name
host.dyndns.org
User Name/Email
Password/Key
Result
Note
For TZO, you can have a 30 days free trial hereor manage your TZO account in control panel
For DynDNS, you can create your DynDNS account here
Apply change
Reset

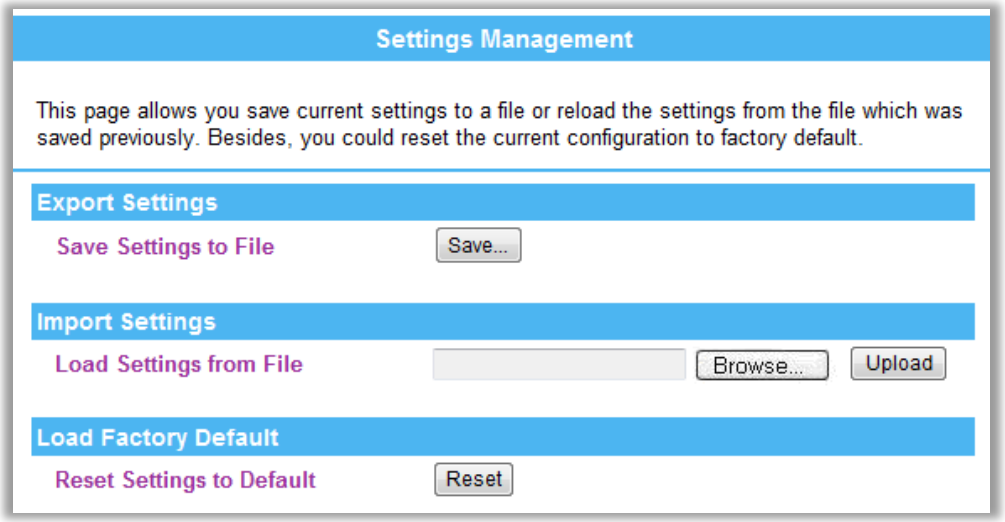
Item / Function	Descriptions / Instructions
Enable DDNS	Check to enable the DDNS function.
Service Provider	Select the desired DDNS Service Provider DynDNS, TZO or Oray from the pull-down list.
Domain Name	Here shows the domain name of the service provider.
User Name/Email	Enter your email that you registered in service provider website. (You can refer to below Note information to apply a account form the service provider website.)
Password/Key	Enter your passwords that you registered in service provider website. Maximum input is 30 alphanumeric characters (case sensitive).
Apply Changes	After completing the settings on this page, click Apply Changes button to save the settings.
Reset	Click Reset button to restore to default values.

Upgrade Firmware


Upgrade Firmware
This page allows you upgrade the Access Point firmware to new version. Please note, do not power off the device during the upload because it may crash the system.
Upgrade Firmware
Firmware Version
v2.2.2
Select File
Browse...
Upload
Reset

Item / Function	Descriptions / Instructions
Firmware Version	Here display the latest firmware version.
Select File	Click the Browse button to find and open the firmware file (the browser will display to correct file path.)
Upload	Click the Upload button to perform.
Reset	Click Reset button to restore to default values.

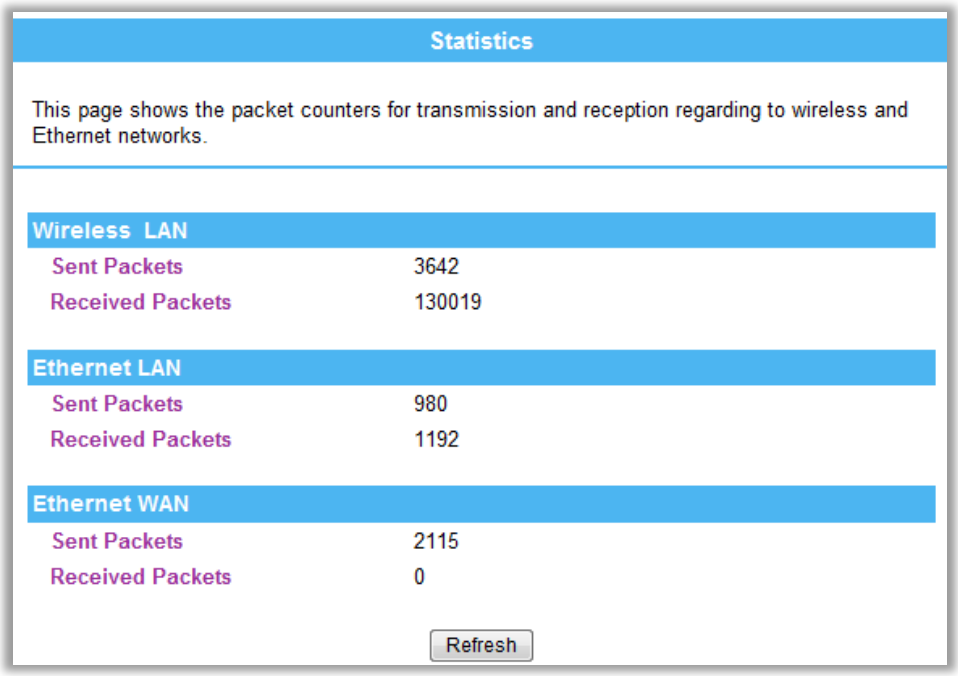
Settings Management


Settings Management
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Export Settings
Save Settings to File
Save...
Import Settings
Load Settings from File
Browse...
Upload
Load Factory Default
Reset Settings to Default
Reset

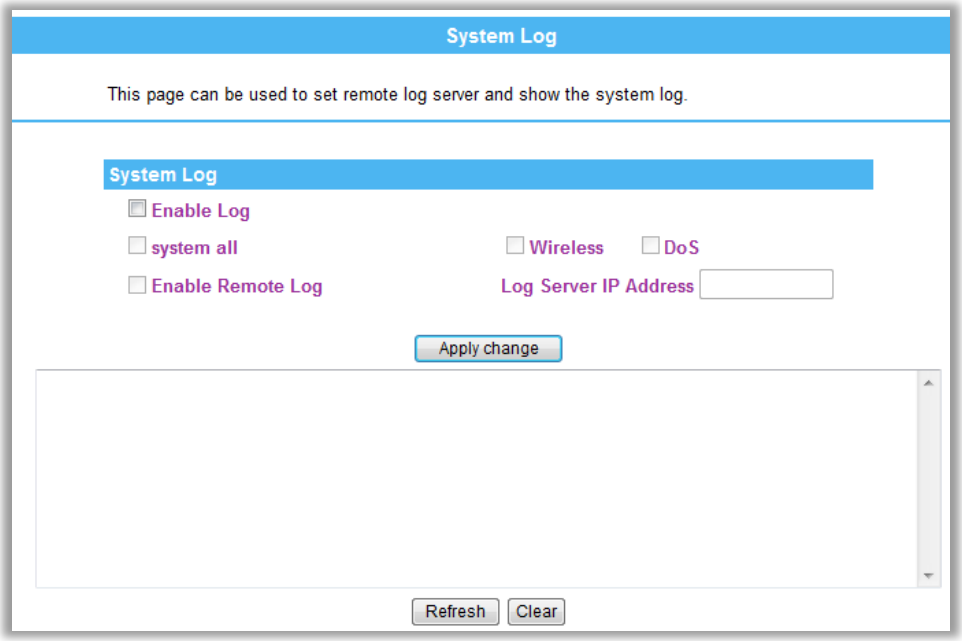
Item / Function	Descriptions / Instructions
Save Settings to File	Click the **Save** button to save the current settings file in the PC.
Load Settings form File	Click the **Browse** button to find and open the previous saved file (the browser will display to correct file path.) Then, click **Upload** button to upload the previous file.
Reset Settings to Default	Click **Reset** button to set the device back to default settings.

Statistics

This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.



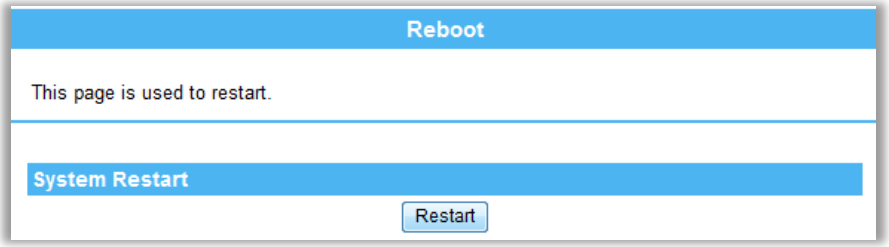
System Log



Item / Function	Descriptions / Instructions
Enable Log	Check to enable logging function.
System all	Activates all logging functions.
Wireless	Only logs related to the wireless LAN will be recorded.
DoS	Only logs related to the DoS protection will be recorded.
Enable Remote Log	Only logs related to the Remote control will be recorded.
Log Server IP address	Only logs related to the server will be recorded.
Apply Changes	After completing the settings on this page, click **Apply Changes** button to save current settings.
Refresh	Click **Refresh** button to renew the logs.
Clear	Click **Clear** button to delete the logs.

Reboot

Click the **Reboot** button to restart the Wireless Router.



CHAPTER 4: PC CONFIGURATION

4.1. Overview

For each PC, the following may need to be configured:

- TCP/IP network settings
- Internet Access configuration
- Wireless configuration

4.2. Windows Clients

- This section describes how to configure Windows clients for Internet access via the Wireless Router.
- The first step is to check the PC's TCP/IP settings.
- The Wireless Router uses the TCP/IP network protocol for all functions, so it is essential that the TCP/IP protocol be installed and configured on each PC.

TCP/IP Settings - Overview

If using default Wireless Router settings, and default Windows TCP/IP settings, no changes need to be made.

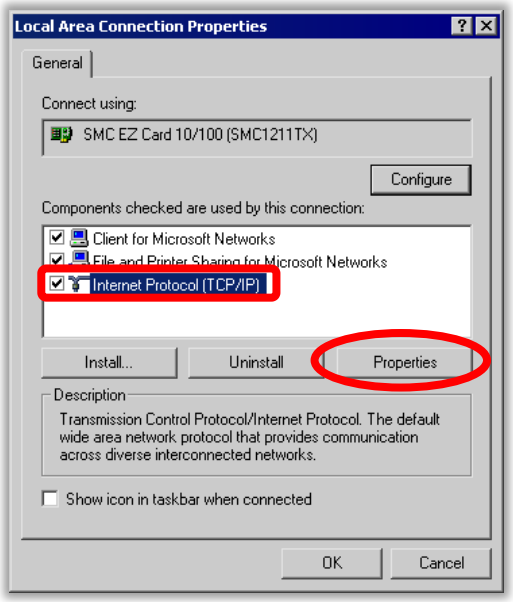
- By default, the Wireless Router will act as a DHCP Server, automatically providing a suitable IP address (and related information) to each PC when the PC boots.
- For all non-server versions of Windows, the default TCP/IP setting is to act as a DHCP client.

If using a Fixed (specified) IP address, the following changes are required:

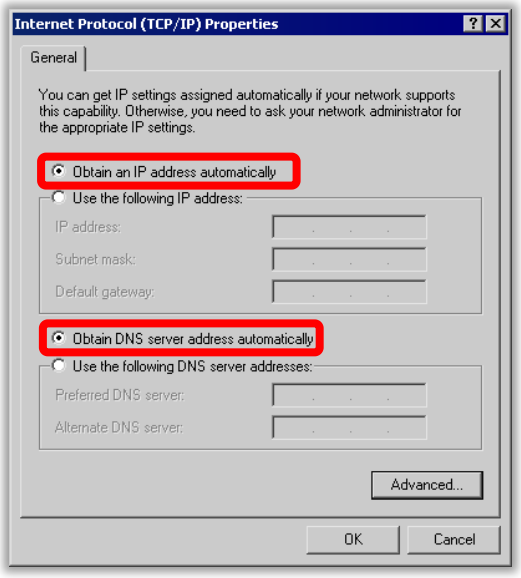
- The *Gateway* must be set to the IP address of the Wireless Router.
- The *DNS* should be set to the address provided by your ISP (Internet Service Provider.)

Checking TCP/IP Settings - Windows 2000

1. Go to ***Start ▶ Control Panel ▶ Network and Dial-up Connection***.
2. Right click the ***Local Area Connection*** icon and select ***Properties***. You should see a screen like the following:
3. Select the ***Internet Protocol (TCP/IP)*** protocol for your network card.



4. Click on the ***Properties*** button. You should then see a screen like the following.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Ensure your ***TCP/IP*** settings are correct.

Using DHCP

- To use DHCP, select ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically***. This is the default Windows setting. Using this is recommended. By default, the Wireless Router will act as a DHCP Server.
- Restart your PC to ensure it obtains an IP address from the Wireless Router automatically.

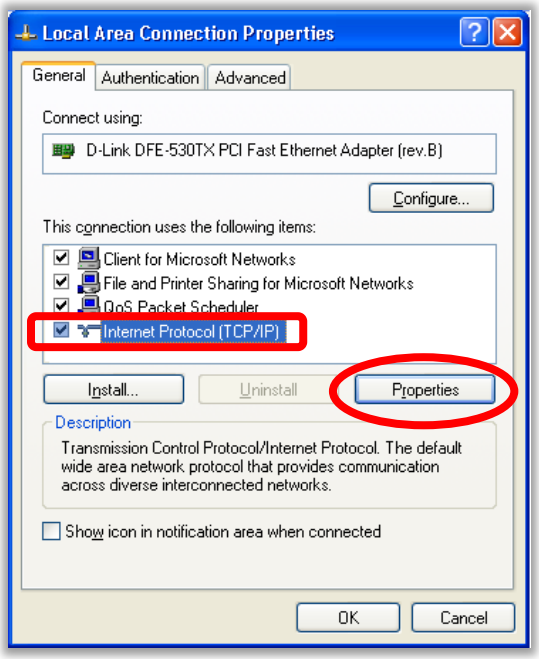
Using a fixed IP Address ("Use the following IP Address")

If your PC is already configured, check with your network administrator before making the following changes.

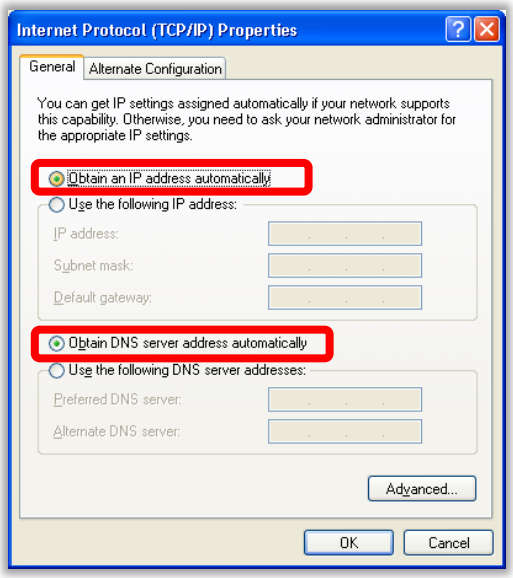
- Enter the Wireless Router's IP address in the ***Default gateway*** field. (Your LAN administrator can advise you of the IP address they assigned to the Wireless Router.)
- If the ***DNS Server*** fields are empty, select ***Use the following DNS server addresses***, and enters the DNS address or addresses provided by your ISP.

Checking TCP/IP Settings - Windows XP

1. Go to ***Start*** ▶ ***Control Panel*** ▶ ***Network Connection***.
2. Right click the ***Local Area Connection*** icon and choose ***Properties***. You should see a screen like the following:
3. Select the ***Internet Protocol (TCP/IP)*** protocol for your network card.



4. Click on the ***Properties*** button. You should then see a screen like the following.


Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Ensure your TCP/IP settings are correct.

Using DHCP

- To use DHCP, select ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically***. This is the default Windows setting. Using this is recommended. By default, the Wireless Router will act as a DHCP Server.
- Restart your PC to ensure it obtains an IP address from the Wireless Router.

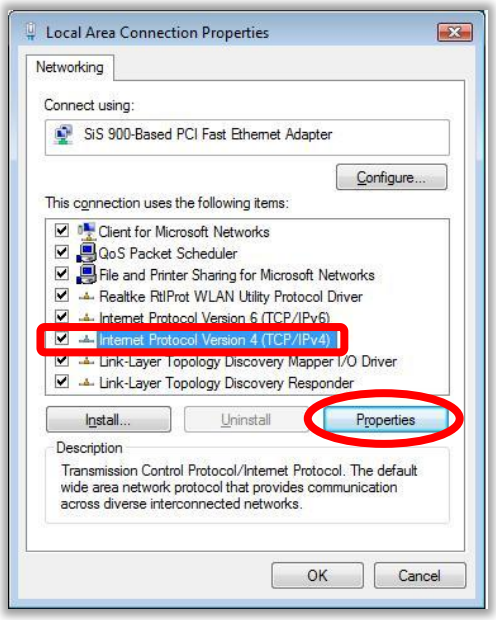
Using a fixed IP Address ("Use the following IP Address")

If your PC is already configured, check with your network administrator before making the following changes.

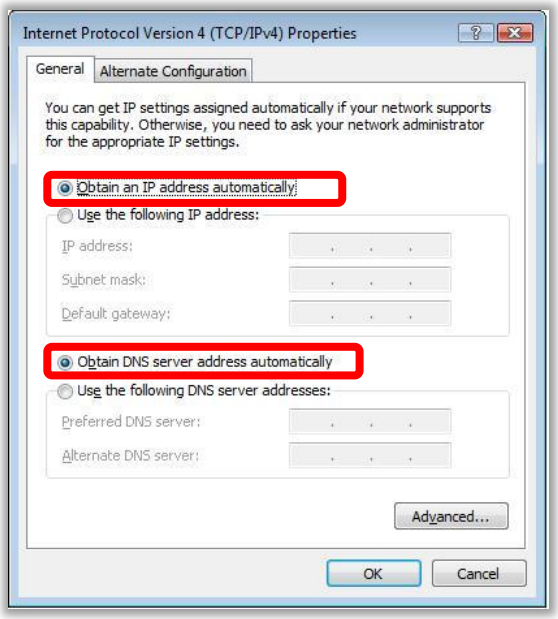
- In the ***Default gateway*** field, enter the Wireless Router's IP address. Your LAN administrator can advise you of the IP address they assigned to the Wireless Router.
- If the ***DNS Server*** fields are empty, select ***Use the following DNS server addresses***, and enters the DNS address or addresses provided by your ISP, then click *OK*.

Checking TCP/IP Settings - Windows Vista

1. Go to ***Start ▶ Control Panel ▶ Network and Internet ▶ Network and Sharing Center ▶ Manage Network Connections ▶ Local Area Connection***.
2. Right click the ***Local Area Connection*** icon and choose ***Properties***. You should see a screen like the following:
3. Select the ***Internet Protocol Version 4 (TCP/IPv4)*** or ***6 (TCP/IPv6)*** for your network card


Local Area Connection Properties
Networking
Connect using:
SiS 900-Based PCI Fast Ethernet Adapter
Configure...
This connection uses the following items:
Client for Microsoft Networks
QoS Packet Scheduler
File and Printer Sharing for Microsoft Networks
Realtke RtlProt WLAN Utility Protocol Driver
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
Link-Layer Topology Discovery Mapper I/O Driver
Link-Layer Topology Discovery Responder
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK
Cancel

4. Click on the ***Properties*** button. You should then see a screen like the following.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Ensure your TCP/IP settings are correct.

Using DHCP

- To use DHCP, select ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically***. This is the default Windows setting. Using this is recommended. By default, the Wireless Router will act as a DHCP Server.
- Restart your PC to ensure it obtains an IP address from the Wireless Router.

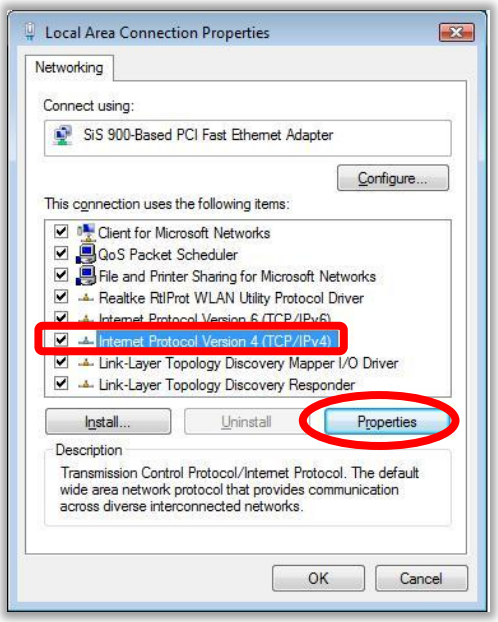
Using a fixed IP Address ("Use the following IP Address")

If your PC is already configured, check with your network administrator before making the following changes.

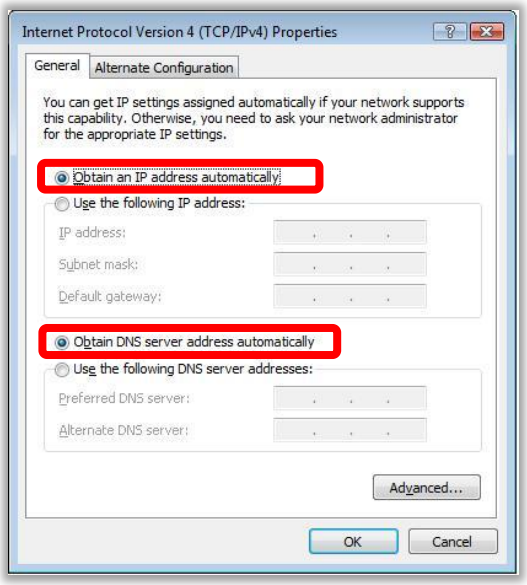
- In the ***Default gateway*** field, enter the Wireless Router's IP address. Your LAN administrator can advise you of the IP address they assigned to the Wireless Router.
- If the ***DNS Server*** fields are empty, select ***Use the following DNS server addresses***, and enters the DNS address or addresses provided by your ISP, then click *OK*.

Checking TCP/IP Settings - Windows 7

1. Go to ***Start ▶ Control Panel ▶ Network and Sharing Center ▶ Manage Network Connections ▶ Local Area Connection***.
2. Right click the ***Local Area Connection*** icon and choose ***Properties***. You should see a screen like the following:
3. Select the ***Internet Protocol Version 4 (TCP/IPv4)*** or ***6 (TCP/IPv6)*** for your network card.


Local Area Connection Properties
Networking
Connect using:
SiS 900-Based PCI Fast Ethernet Adapter
Configure...
This connection uses the following items:
Client for Microsoft Networks
QoS Packet Scheduler
File and Printer Sharing for Microsoft Networks
Realtke RtlProt WLAN Utility Protocol Driver
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
Link-Layer Topology Discovery Mapper I/O Driver
Link-Layer Topology Discovery Responder
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK
Cancel

4. Click on the ***Properties*** button. You should then see a screen like the following.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Ensure your TCP/IP settings are correct.

Using DHCP

- To use DHCP, select ***Obtain an IP address automatically*** and ***Obtain DNS server address automatically***. This is the default Windows setting. Using this is recommended. By default, the Wireless Router will act as a DHCP Server.
- Restart your PC to ensure it obtains an IP address from the Wireless Router.

Using a fixed IP Address ("Use the following IP Address")

If your PC is already configured, check with your network administrator before making the following changes.

- In the ***Default gateway*** field, enter the Wireless Router's IP address. Your LAN administrator can advise you of the IP address they assigned to the Wireless Router.
- If the ***DNS Server*** fields are empty, select ***Use the following DNS server addresses***, and enters the DNS address or addresses provided by your ISP, then click *OK*.

Internet Access

To configure your PCs to use the Wireless Router for Internet access:

- Ensure that the ADSL modem, DSL modem, Cable modem, or other permanent connection is functional.
- Use the following procedure to configure your Browser to access the Internet via the LAN, rather than by a Dial-up connection.

For Windows 2000

1. Select ***Start*** menu ▶ ***Settings*** ▶ ***Control Panel*** ▶ ***Internet Options***.
2. Select the ***Connection*** tab, and click the ***Setup*** button.
3. Select "***I want to set up my Internet connection manually,*** or ***I want to connect through a local area network (LAN)***" and click ***Next***.
4. Select "***I connect through a local area network (LAN)***" and click ***Next***.
5. Ensure all of the boxes on the following ***Local area network Internet Configuration*** screen are unchecked.
6. Check the "No" option when prompted "Do you want to set up an Internet mail account now?"
7. Click ***Finish*** to close the Internet ***Connection Wizard Setup*** is now completed.

For Windows XP

1. Select ***Start*** menu ▶ ***Control Panel*** ▶ ***Network and Internet Connections***.
2. Select Set up or change your Internet Connection.
3. Select the Connection tab, and click the Setup button.

4. Cancel the pop-up "Location Information" screen.
5. Click **Next** on the "New Connection Wizard" screen.
6. Select "**Connect to the Internet**" and click **Next**.
7. Select "**Set up my connection manually**" and click **Next**.
8. Check "**Connect using a broadband connection that is always on**" and click **Next**.
9. Click ***Finish*** to close the ***New Connection Wizard Setup*** is now completed.

For Windows Vista

1. Select ***Start*** menu ▶ ***Control Panel*** ▶ ***Network and Internet*** ▶ ***Network and Sharing Center***.
2. Select ***Set up a connection or network***.
3. Select ***Connect to the Internet*** and click ***Next*** to continue.
4. Select ***Broadband (PPPoE)***.
5. Enter ***User name*** and ***Password*** that provided by the ISP, then click ***Connect*** to make a connection.

For Windows 7

1. Select ***Start*** menu ▶ ***Control Panel*** ▶ ***Network Sharing Center***.
2. Select ***Set up a new connection or network***.
3. Select ***Connect to the Internet*** and click ***Next*** to continue.
4. Select ***Broadband (PPPoE)***.
5. Enter ***User name*** and ***Password*** that provided by the ISP, then click ***Connect*** to make a connection.

Accessing AOL

To access AOL (America On Line) through the Wireless Router, the *AOL for Windows* software must be configured to use TCP/IP network access, rather than a dial-up connection. The configuration process is as follows:

1. Start the AOL for Windows communication software. Ensure that it is Version 2.5, 3.0 or later. This procedure will not work with earlier versions.
2. Click the **Setup** button.
3. Select Create Location, and change the location name from "New Locality" to " Wireless Router ".
4. Click **Edit Location**. Select TCP/IP for the Network field. (Leave the Phone Number blank.)
5. Click Save, then OK.
6. Configuration is now complete.
7. Before clicking "Sign On", always ensure that you are using the " Wireless Router " location.

4.3. Macintosh Clients

From your Macintosh, you can access the Internet via the Wireless Router. The procedure is as follows.

1. Open the TCP/IP Control Panel.
2. Select Ethernet from the Connect via pop-up menu.
3. Select Using DHCP Server from the Configure pop-up menu. The DHCP Client ID field can be left blank.
4. Close the TCP/IP panel, saving your settings.

If using manually assigned IP addresses instead of DHCP, the required changes are:

- Set the *Router Address* field to the Wireless Router's IP Address.
- Ensure your DNS settings are correct.

4.4. Linux Clients

To access the Internet via the Wireless Router, it is only necessary to set the Wireless Router as the "Gateway". Ensure you are logged in as "root" before attempting any changes.

Fixed IP Address

By default, most Unix installations use a fixed IP Address. If you wish to continue using a fixed IP Address, make the following changes to your configuration.

- Set your "Default Gateway" to the IP Address of the Wireless Router.
- Ensure your DNS (Domain Name server) settings are correct.

To act as a DHCP Client (Recommended)

The procedure below may vary according to your version of Linux and X -windows shell.

1. Start your X Windows client.
2. Select *Control Panel – Network*.
3. Select the "*Interface*" entry for your Network card. Normally, this will be called "eth0".
4. Click the *Edit* button, set the "protocol" to "DHCP", and save this data.
5. To apply your changes:
   Use the "Deactivate" and "Activate" buttons, if available.
   OR, restart your system.

4.5. Other Unix Systems

To access the Internet via the Wireless Router:

- Ensure the "Gateway" field for your network card is set to the IP Address of the Wireless Router.
- Ensure your DNS (Name Server) settings are correct.

4.6. Wireless Station Configuration

- This section applies to all wireless stations (client end) wishing to use the Wireless Router as an access point, regardless of the operating system that is used on the client.
- To use the Wireless Router, each wireless station must have compatible settings, as following:

Mode	The mode must be set to *Infrastructure*.
SSID (ESSID) (Extended Service Set Identifier)	The network name must match the value used on the Wireless Router. ***Note! The SSID*** (service set identifier) ***is case- sensitive.***
Disable	If there is no security is enabled on the Wireless Router, the security of each station should be disabled as well. And, you can connect the Wireless Router without security, but it is NOT recommended.
WEP **Open System/ Shared Key/ Auto**	By default, WEP on the Wireless Router is disabled. Shared Key only supports WEP as encryption method. AUTO (Open/Shared) means AP can accept STA connect to it using OPEN-WEP or SHARED-WEP. ● If WEP remains disabled on the Wireless Router, all stations must have WEP disabled. ● If WEP is enabled on the Wireless Router, each station must use the same settings as the Wireless Router.
Personal (Pre-Shared Key)	WPA-PSK (TKIP/AES)/ WPA2-PSK (TKIP/AES): If one of these securities is enabled on the Wireless

WPA **WPA2** **WPA2-Mixed**	Router. To make a connection, each station must use the same algorithms and pass phrase as the Wireless Router. **Pre-Shared Key Format:** There are two formats for choice to set the Pre-shared key, **Passphrase** and **Hex (64 characters)**. If **Hex** is selected, users will have to enter 64 characters string at a time. For easier configuration, the **Passphrase (**at least 8 characters) format is recommended. **Pre-Shared Key :** Pre-Shared Key serves as a password. Users may key in 8 to 63 characters string if you selected passphrase. Pre-shared key format to set the passwords or leave it blank, in which the 802.1x Authentication will be activated. Make sure the same password is used on client's end.
Enterprise (RADIUS) **WPA** **WPA2** **WPA2-Mixed** **802.1x**	**RADIUS Server**: RADIUS is an authentication, authorization and accounting client-server protocol. The client is a Network Access Server that desires to authenticate its links. The RADIUS is a server that has access to a user database with authentication information. Each station must set up the RADIUS Server's IP address, port and passwords that provided by your ISP.

By default, the Wireless Router will allow 802.11b, 802.11g and 802.11n connections.

CHAPTER 5: TROUBLESHOOTING

5.1. Overview

This chapter covers some common problems that may be encountered while using the Wireless Router and some possible solutions to them. If you follow the suggested steps and the Wireless Router still does not function properly, contact your dealer for further advice.

5.2. General Problems

Problem 1:	Can't connect to the Wireless Router to configure it.
Solution 1:	Check the following: • Check the Wireless Router is properly installed, LAN connections are OK, and it is powered ON. • Ensure that your PC and the Wireless Router are on the same network segment. • If your PC is set to "Obtain an IP address automatically" (DHCP client), please restart it. • If your PC uses a Fixed (Static) IP address, ensure that it is using an IP address within the range 192.168.123.1 to 192.168.123.253 and thus compatible with the Wireless Router's default IP Address of 192.168.123.254. Also, the Network Mask should be set to 255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using *Control Panel-Network* to check the *Properties* for the TCP/IP protocol. You can check Chapter 4: PC Configuration- TCP/IP settings for reference.

5.3. Internet Access

Problem 1:	When I enter a URL or IP address I get a time out error.
Solution 1:	A number of things could be causing this. Try the following troubleshooting steps. • Check if other PCs work. If they do, ensure that your PCs IP settings are correct. If using a Fixed (Static) IP address, check the Network Mask, Default gateway and DNS as well as the IP address. • If the PCs are configured correctly, but still not working, check the Wireless Router. Ensure that it is connected and ON. Connect to it and check its settings. (If you can't connect to it, check the LAN and power connections.) • If the Wireless Router is configured correctly, check your Internet connection (ADSL/Cable modem) to see that it is working correctly.

Problem 2:	Some applications do not run properly when using the Wireless Router.
Solution 2:	The Wireless Router processes the data passing through it, so it is not transparent. Use the *Filter Settings* feature to allow the use of Internet applications, which do not function correctly. If this does solve the problem you can use the *DMZ* function. This should work with almost every application, but: • It is a security risk, since the firewall is disabled. • Only one (1) PC can use this feature.

5.4. Wireless Access

Problem 1:	My PC can't locate the Wireless Router.
Solution 1:	Check the following: • **Mode:** Your PC is set to *Infrastructure Mode*. (Access Points are always in *Infrastructure Mode*) • **SSID:** The SSID (service set identifier) on your PC and the Wireless Router are the same. Remember that the SSID (service set identifier) is case-sensitive. So, for example "**W**orkgroup" does NOT match "**w**orkgroup." • **Security:** Both your PC and the Wireless Router must have the same setting for security. o **Disabled:** The default setting for the Wireless Router security is disabled, so your wireless station should also has security disabled. o **Enabled:** If security is enabled on the Wireless Router, your PC must have security enabled, and the key must be matched. o It's strongly suggest to set up security that could prevent any unauthorized accessing to your wireless network. Setting WPA2 security is recommended that offers stronger security than WEP. Both your computer and the Wireless Router must have the same settings for security. • **Channel:** The wireless local area network is activated and configured by default. If necessary, please check and match channel for the terminal, for example, your notebook. Both your computer (client) and the Wireless Router must set to the same channel for connection.

Problem 2:	Wireless connection speed is very slow.
Solution 2:	The wireless system will connect at the highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with the following: • **Wireless Router location:** Try adjusting the location and orientation of the Wireless Router. To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Router. Remember that the connection range can be as little as 100 feet in poor environments. • **Wireless Channels:** If interference is the problem, changing to another channel may show a well improvement. • **Radio Interference:** Other devices may be causing interference. You can try to turn off other wireless devices, and see if this helps. Any "noisy" devices should be shielded or relocated. • **RF Shielding:** Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Wireless Router.

CHAPTER 6: ABOUT WIRELESS LANS

6.1. BSS (Basic Service Set)

A group of wireless stations and a single access point, all using the same SSID (service set identifier), form a Basic Service Set (BSS).

Using the same SSID (service set identifier) is essential. Devices with different SSIDs are unable to communicate with each other.

6.2. Channels

The wireless channel sets the radio frequency used for communication.

- Access points use a fixed channel. You can select the channel used. This allows you to choose a channel which provides the least interference and best performance. In the USA and Canada, 11 channels are available. If using multiple access points, it is better if adjacent access points use different channels to reduce interference.
- In "Infrastructure" mode, wireless stations normally scan all channels, looking for an access point. If more than one access point can be used, the one with the strongest signal is used. (This can only happen within an ESS (Extended Service Set)).
- ESS: In Infrastructure mode, one or more BSS (Basic Service Set) can set up a ESS (Extended Service Set). User can access and roaming BSS data and the access point should be set to the same ESSID (Extended Service Set Identifier) to allow roaming.

Note to US model owner:

To comply with US FCC regulation, the country selection function has been completely removed from all US models. The above function is for non-US models only.

6.3. Security

WEP

WEP (Wired Equivalent Privacy) is a standard for encrypting data before it is transmitted. This is desirable because it is impossible to prevent snoopers from receiving any data which is transmitted by your wireless stations. But if the data is encrypted, then it is meaningless unless the receiver can decrypt it.

If WEP is used, the wireless stations and the access point must have the same security settings for each of the following:

WEP	64 Bits, 128 Bits.
Key	For 64 Bits encryption, the Key value must match. For 128 Bits encryption, the Key value must match.
WEP Authentication	Open System or Shared Key.

WPA/ WPA2/ WPA-Mixed

WPA/ WPA2 (Wi-Fi Protected Access) is more secure than WEP. It uses a "Shared Key" which allows the encryption keys to be regenerated at a specified interval. There are several encryption options: **TKIP, AES, TKIP-AES** and additional setup for **RADIUS** is required in this method. The most important features beyond WPA to become standardized through 802.11i/WPA2 are: pre-authentication, which enables secure fast roaming without noticeable signal latency.

If WPA or WPA2 is used, the wireless stations and access point must have the same security settings.

802.1x

With **802.1x** authentication, a wireless PC can join any network and receive any messages that are not encrypted, however, additional setup for **RADIUS** to issue the WEP key dynamically will be required.
RADIUS is an authentication, authorization, and accounting client-server protocol. The client is a network access server that desires to authenticate its links. The server has access to a user database with authentication information.

6.4. Wireless LAN Configuration

To allow wireless stations (STA) to access the access point (AP), the wireless stations and the access point must use the same settings, as follows:

Mode	The mode must be set to *Infrastructure*.
SSID (ESSID) (Extended Service Set Identifier)	The network name must match the value used on the Wireless Router. ***Note! The SSID*** (service set identifier) ***is case- sensitive.***
Disable	If there is no security is enabled on the Wireless Router, the security of each station should be disabled as well. And, you can connect the Wireless Router without security, but it is NOT recommended.
WEP **Open System/** **Shared Key/** **Auto**	By default, WEP on the Wireless Router is disabled. Shared Key only supports WEP as encryption method. AUTO (Open/Shared) means AP can accept STA connect to it using OPEN-WEP or SHARED-WEP. ● If WEP remains disabled on the Wireless Router, all stations must have WEP disabled. ● If WEP is enabled on the Wireless Router, each station must use the same settings as the Wireless Router.
Personal (Pre-Shared Key) **WPA** **WPA2** **WPA2-Mixed**	WPA-PSK (TKIP/AES)/ WPA2-PSK (TKIP/AES): If one of these securities is enabled on the Wireless Router. To make a connection, each station must use the same algorithms and pass phrase as the Wireless Router. **Pre-Shared Key Format:** There are two formats for choice to set the Pre-shared key, **Passphrase** and **Hex (64 characters)**. If **Hex** is selected, users will have to enter 64 characters string at a time. For easier configuration, the **Passphrase (**at least 8 characters) format is recommended. **Pre-Shared Key:** Pre-Shared Key serves as a password. Users may key in 8 to 63 characters string if you selected passphrase. Pre-shared key format to set the passwords or leave it blank, in which the 802.1x authentication will be activated. Make sure the same password is used on client's end.
Enterprise (RADIUS) **WPA** **WPA2** **WPA2-Mixed** **802.1x**	**RADIUS Server**: RADIUS is an authentication, authorization and accounting client-server protocol. The client is a network access server that desires to authenticate its links. The RADIUS is a server that has access to a user database with authentication information. Each station must set up the RADIUS server's IP address, port and passwords that provided by your ISP.

CHAPTER 7: TECHNICAL SUPPORT

7.1. FREE TECHNICAL SUPPORT HOTLINE

Monday to Friday, 9.00 am – 6.00 pm (*Closed on Saturdays, Sundays and Public Holidays)*

- Singapore : (65) 6357 0666
- Malaysia : (60) 3 8023 9151
- Indonesia : (62) 21 3483 1717

7.2. WALK-IN SUPPORT

Monday to Friday, 9.00 am – 6.00 pm (*Closed on Saturdays, Sundays and Public Holidays)*

- Singapore : FIDA INTERNATIONAL (S) PTE LTD
  : Block 16 Kallang Place, #06-02 Kallang Basin Industrial Estate, Singapore 339156.
- Malaysia : FIDA SYSTEMS (M) SDN BHD
  : 29 Jalan USJ 1/31, 47600 Subang Jaya, Selangor Darul Ehsan, Malaysia.
- Indonesia : PROLiNK INDONESIA
  : Jl. Cideng Barat No. 79, Jakarta Pusat 10150 - Indonesia.

7.3. ONLINE TECHNICAL SUPPORT

- Singapore : support@fida.com
- Malaysia : support_my@fida.com
- Indonesia : support@prolink.co.id

Register Online For Your Product Warranty

www.prolink2u.com

SINGAPORE
FIDA INTERNATIHIDUPAL (S) PTE LTD
Block 16 Kallang Place, #06-02 Kallang Basin Industrial Estate, Singapataue 339156.
Tel : (65) 6357 0668
Email : support@fida.com

MALAYSIA
FIDA SYSTEMS (M) SDN BHD
29 Jalan USJ 1/31, 47600 Subang Jaya, Selangatau Darul Ehsan, Malaysia.
Tel : (60) 3 8024 9151
Email : support_my@fida.com

INDONESIA
PROLiNK INDONESIA
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Tel : (62) 21 3483 1777
Email : support@prolink.co.id

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www.prolink2u.com

PROLiNK® WNR1008

3.75G Wireless-N 4-Port Gigabit Router

Buku Manual

Versi 1.00

(Indonesia)

PERNYATAAN KOMISI KOMUNIKASI FEDERAL INTERFERENSI

Peralatan ini telah diuji dan memenuhi batas untuk Kelas B perangkat digital, sesuai dengan Bagian 15 dari Peraturan FCC. Batasan ini dirancang untuk memberikan perlindungan memadai terhadap gangguan yang membahayakan pada insalasi rumah. Peralatan ini menghasilkan dan dapat memancarkan radio frekuensi energy da jika tidak terpasang dan digunakan sesuai dengan petunjuk, dapat menyebabkan gangguan yang membahayakan pada komunikasi radio.
Namun, tidak ada jaminan bahwa inerferensi tidak akan terjadi pada instalasi tertentu. Jika peralatan ini menimbulan interferensi pada penerima televise, yang dapat ditentukan dengan memutar peralatan off dan pada, pengguna dianjurkan untuk mencoba memperbaiki interferensi tersebut dengan salah satu langkah-langkah berikut:

- Arahkan atau posisikan kembali antena penerima.
- Meningkatkan pemisahan antara peralatan dan penerima.
- Hubungkan peralatan ke stopkontak pada sirkuit yang berbeda dari yang dimana penerima terhubung.
- Tanyakan pada dealer atau teknisi radio / TV untuk bantuan.

FCC Perhatian: Perubahan atau modifikasi yang tidak disetujui oleh pihak bertanggung jawab atas kepatuhan dapat membatalkan hak pengguna untuk mengoperasikan peralatan.

Perangkat ini memenuhi aturan Part 15 of the FCC. Pengoperasian tunduk pada dua kondisi sebagai berikut: (1) perangkat ini tidak menimbulkan gangguan yang membahayakan, dan (2) perangkat ini harus menerima interferensi yang diterima, termasuk interferensi yang dapat menyebabkan pengoperasian yang tidak diinginkan.

Buku Manual atau buku petunjuk secara disengaja atau tidak memperingatkan pengguna bahwa perubahan atau modifikasi yang tidak disetujui oleh pihak yang bertanggung jawab atas kepatuhan dapat membatalkan kewenangan pengguna untuk mengoperasikan peralatan

PERHATIAN:

1. Untuk memenuhi persyaratan kepatuhan pemaparan RF FCC, jarak pemisahan minimal 20 cm harus dijaga antara antena perangkat ini dan semua atauang.
2. Transmitter ini tidak boleh terletak atau yang beroperasi dalam hubungannya dengan antena lain atau pemancar.

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BAGIAN 1: PENDAHULUAN

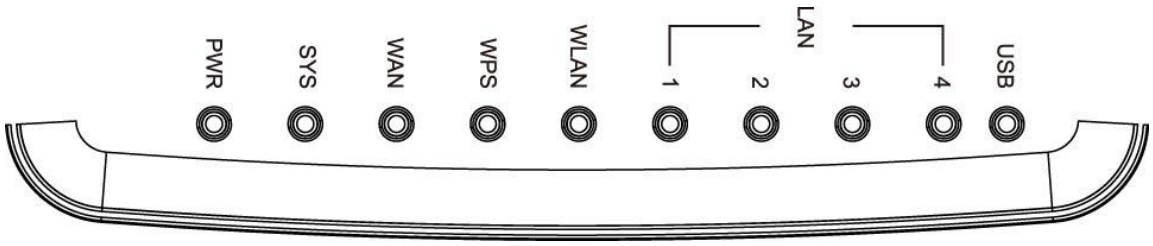
PROLiNK® WNR1008 3.75G Wireless-N 4-Port Gigabit Router mendukung 4 port Ethernet 10/100/1000M untuk LAN dan 1 port 10/100/1000M interface Ethernet untuk WAN. Dengan teknologi MIMO, dapat mendukung kecepatan transmisi data 6 kali lebih banyak (sampai dengan 300 Mbps) dan cakupan 3 kali lebih dari perangkat IEEE 802.11b/g. Router nirkabel memungkinkan seluruh jaringan Anda berbagi dengan berkecepatan tinggi atau koneksi DSL internet. Dengan itu, Anda dapat berbagi koneksi internet berkecepatan tinggi, file, printer, dan game multi-player dengan kecepatan yang luar biasa, tanpa harus repot merangkai kabel. Hal ini juga menawarkan konfigurasi yang mudah untuk jaringan nirkabel Anda di rumah dan menyajikan jaringan nirkabel fungsionalitas tinggi, keamanan, dan fleksibilitas

1.1. FITUR

- Mendukung 4 ports 10/100/1000M Ethernet LAN dan 1 port 10/100/1000M Ethernet interface WAN.
- Clock rate sampai dengan 600MHz.
- Mendukung stdanard IEEE 802.11n/b/g, high speed data rate sampai dengan 300Mbps, two transmit dan two receive path (2T2R)
- Tingkat kemanan tinggi dengan build-in Security: WEP 64/128, WPA, WPA2, 802.1x dan 802.11i.
- Mendukung 1 USB port tambahan.
- Mendukung WPS (Wi-Fi Protected Setup) dengan tombol fisik.
- Mendukung Modus Client, AP, WDS, AP+WDS.
- Advanced Quality of Service (QoS), WMM.
- Konfigurasi web browser yang mudah untuk pengguna rumah.
- Mendukung USB Network attached storage (NAS) dan fungsi media share.

1.2. Detail Fisik

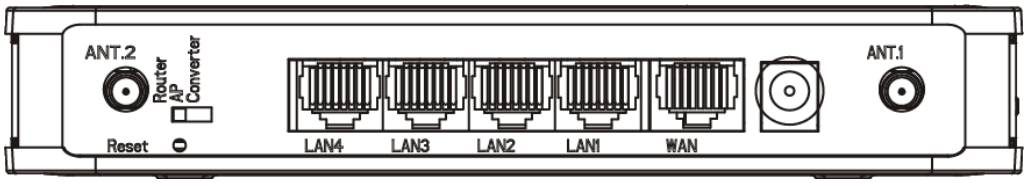
LED Atas (Tampak Atas)



Perilaku LED				
LED	**Tercetak**	**Warna**	**Perilaku**	**Indikasi**
Power	**PWR**	Hijau	HIDUP	Power Hidup
			MATI	Power Mati
System	**SYS**	Hijau	HIDUP	System siap untuk masuk ke web server
			MATI	System belum iap masuk ke web server
			Berkedip	System kembali ke pengaturan default
Internet	**WAN**	Hijau	HIDUP	Internet Aktif
			MATI	Internet Tidak Aktif
			Berkedip	Data Transmit

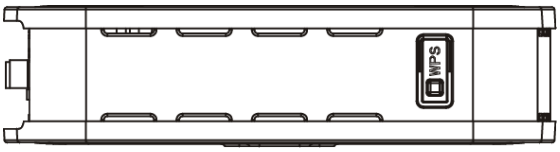
WPS	**WPS**	Hijau	HIDUP	WPS setup berhasil
			MATI	WPS tidak aktif
			Berkedip	WPS siap melakukan koneksi
Wireless LAN	**WLAN**	Hijau	MATI	WLAN tidak aktif
			HIDUP	WLAN aktif
			Berkedip	WLAN data transmit
LAN	1 2 3 4 LAN	Hijau	MATI	LAN tidak aktif
			HIDUP	LAN aktif
			Berkedip	LAN data transmit
USB	**WPS**	Hijau	HIDUP	USB terkoneksi
			MATI	USB tidak terkoneksi

Ports dan Tombol (Tampak Belakang)

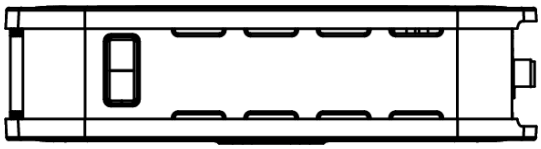


Ports dan buttons	
Ant. 1 **Ant. 2**	**Tempat pemasangan Antena**
Reset	• **Tekan selama 2 detik, lampu LED akan mati.** • **Terus tekan tombol reset selama 2-5 detik, system akan restart secara otomatis** • **Tekan selama lebih dari 5 detik, Wireless Router akan kembali ke pengaturan asal**
LAN 1-4	**Gunakan stdanar kabel LAN (RJ45) untuk koneksi dari PC Anda. Jika diperlukan, semua port dapat dihubungkan ke switch/hub.**
WAN	**Sambungkan ADSL/Cable Modem dengan kabel RJ45.**
DC 12V	**Sambungkan power adaptatau disini.**

Panel Samping (Tampak Samping)



(Left sideview)



(Right sideview)

WPS	
WPS	**Untuk mengaktifkan fungsi WPS, tekan tombol WPS pada Wireless Router lalu lampu LED akan mulai berkedip. Silahkan untuk membuat koneksi dengan perangkat lainya yang mendukung fungsi WPS selama 2 menit.**

Right-sideview	
USB	**Sambungkan USB modem 3.5G atau perangkat USB storage**

BAGIAN 2: MENGENAI MODUS PENGOPERASIAN

Perangkat ini menyediakan aplikasi operasional dengan Router, AP dan Modus Converter yang eksklusif. Perangkat ini dikirimkan dengan konfigurasi yang benar. Jika Anda ingin mengubah pengaturan dalam rangka untuk melakukan konfigurasi lebih maju atau bahkan mengubah modus operasi, Anda dapat SECARA MANUAL beralih ke modus yang Anda diinginkan oleh produsen seperti yang dijelaskan dalam bagian berikut

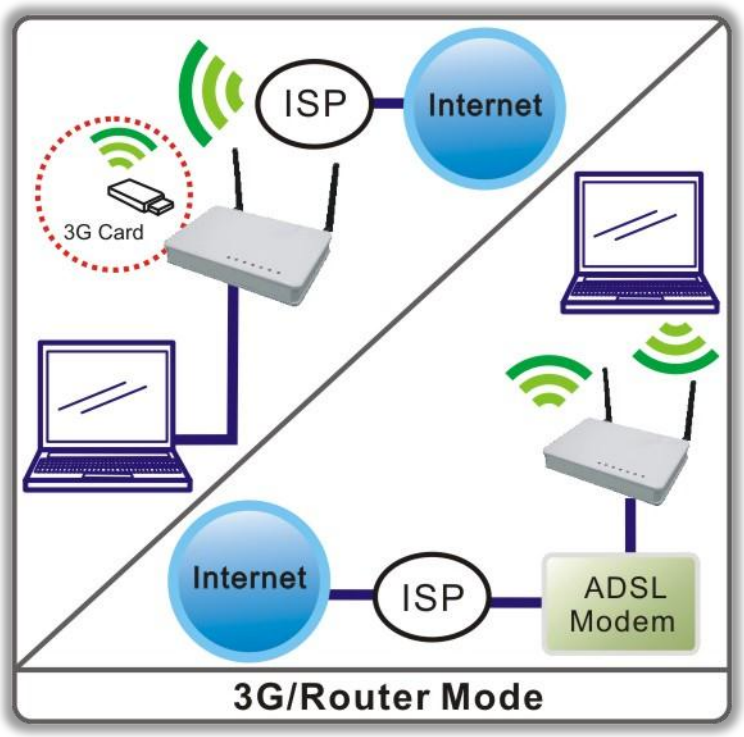
2.1. Modus Operasi

You have to MANUALLY switch the bar into the mode you preferred, Router, AP atau Modus Converters, then the device will reboot automatically into the mode you have selected.
Anda harus SECARA MANUAL menswitch bar untuk beralih ke modus yang Anda sukai, Router, AP atau Modus Converter, maka perangkat akan reboot otomatis ke mode yang telah Anda pilih.

2.2. Modus Router

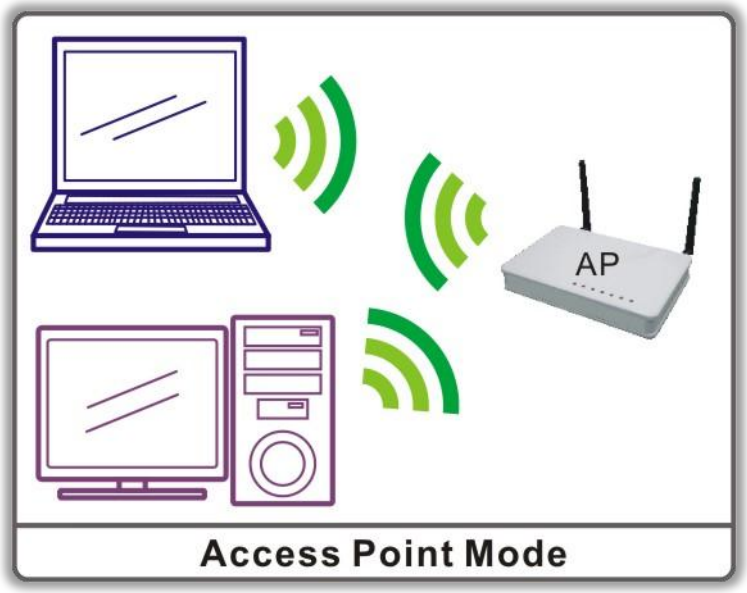
Dalam mode ini, perangkat seharusnya terhubung ke internet melalui ADSL / Cable Modem. NAT ini diaktifkan dan PC dalam LAN port dapat berbagi alamat IP yang sama untuk ISP (Internet Service Provider) melalui port WAN. Jenis sambungan dapat setup di PPPoE, DHCP client, PPTP client, L2TP client atau IP statis.

Sambungan nirkabel akan dibentuk dari LAN point-to-point menjadi point-to-multipoint WAN. Perangkat ini menghubungkan semua stasiun (PC atau notebook dengan fungsi nirkabel) ke jaringan nirkabel. Semua stasiun dapat memiliki Akses Internet jika hanya perangkat memiliki koneksi internet.



2.3. Modus Access Point

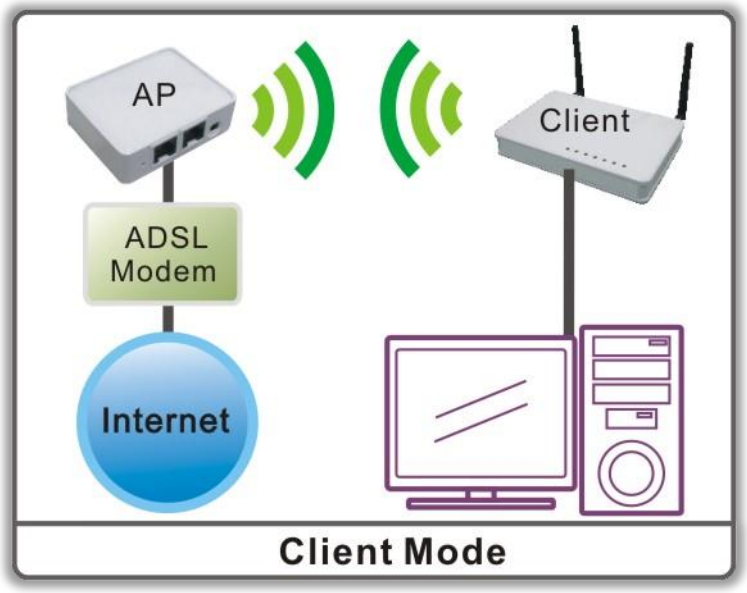
Ketika bertindak sebagai Access Point (AP), perangkat ini menghubungkan semua stasiun (PC / notebook dengan adaptatau jaringan nirkabel) ke jaringan nirkabel. Semua stasiun dapat memiliki Akses Internet jika hanya Access Point memiliki koneksi internet.



2.4. Modus Converter

If set to Modus Converter, a device connects to each other through an access point atau a base station (gateway atau router.) This device can work like a wireless station when it's connected to a computer directly, so that the computer can send packets from wired end to wireless interface.

Jika diatur ke Modus Converter, perangkat akan terhubungkan satu sama lain melalui jalur akses atau base station (gateway atau router.) Perangkat ini dapat bekerja seperti stasiun nirkabel saat itu terhubung ke komputer secara langsung, sehingga komputer dapat mengirimkan paket dari ujung kabel ke antarmuka nirkabel



BAGIAN 3: KONFIGURSI

3.1. Koneksi Hardware

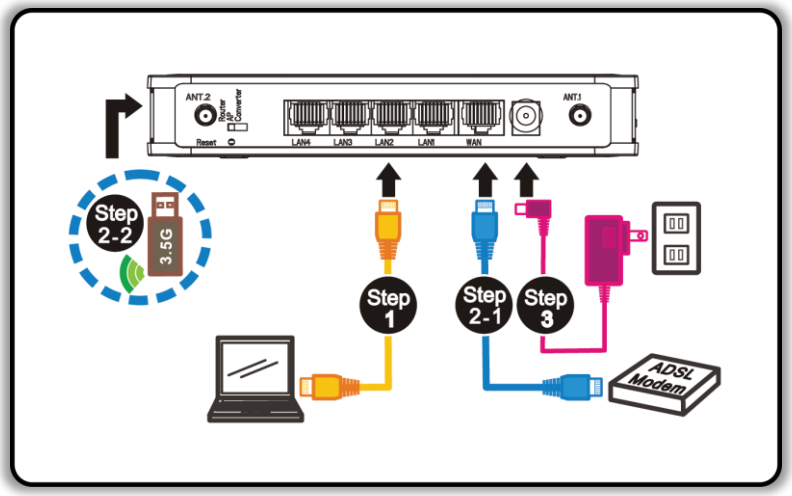
Step 1. Sambungkan salah satu ujung kabel Ethernet ke port LAN (1~4) dari Wireless Router, ujung yang lain ke PC atau notebook Anda.

Step 2. Ada 2 metode untuk dapat terhubung ke Internet **(Hanya satu yang dapat digunakan)**:

2-1. Sambungkan kabel Ethernet ke port WAN (Internet) dari Wireless Router, ujung yang lain ke port ADSL atau cable modem.

2-2. Or Anda dapat menggunakan 3.5G USB card (yang disediakan oleh provider) ke USB port.

Step 3. Akhirnya, hidupkan Wireless Router Anda.

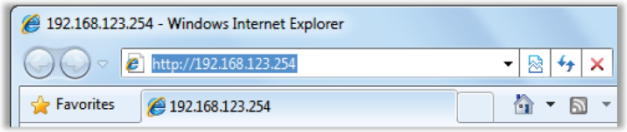


3.2. Login

1. Jalankan computer Anda dan pastikan Anda menggunakan kabel Ethernet untuk berkomunikasi dengan Wireless Router.

2. Jalankan Web Browser Anda.

3. Pada kotak *Address*, masukkan alamat IP dari Wireless Router, sebagai contoh, alamat IP default Wireless Router's adalah: **http://192.168.123.254**



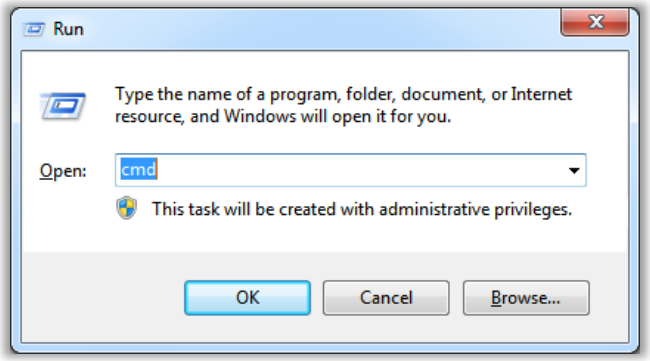
4. Setelah berhasil terhubung, akan muncul gambar berikut. Masukkan username "**admin**" dan password "**password**" untuk login.

Windows Security
The server 192.168.1.254 at WNR1008 requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
admin
Remember my credentials
OK
Cancel

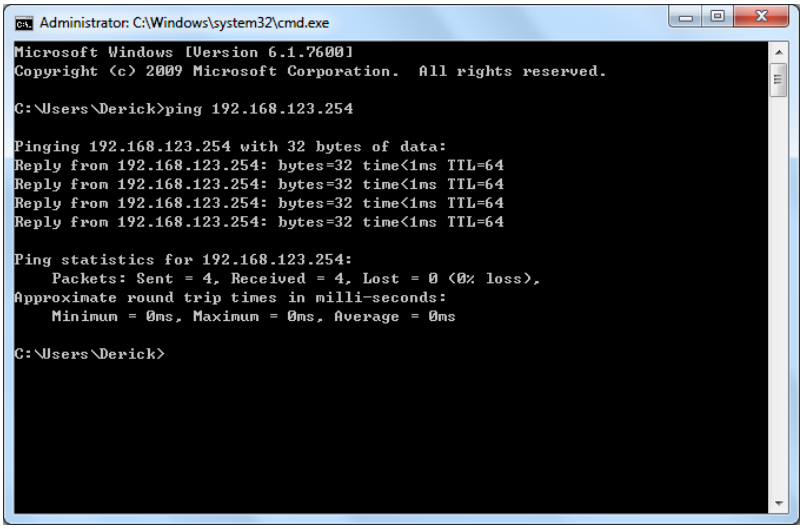
Lihat permasalahan dibawah,

- ***Jika Anda sulit untuk terhubung dengan WNR1008***
- ***Jika WNR1008 tidak merespon***

- Wireless Router sudah terinstall dengan benar, koneksi LAN OK, dan powered menyala. Anda dapat melakukan uji koneksi dengan penggunakan perintah "ping":
  Silahkan ke **Start**>**Run...**> Ketik "**cmd**" maka akan muncul MS-DOS prompt.


Run
Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:
cmd
This task will be created with administrative privileges.
OK
Cancel
Browse...

  Ketik perintah: **ping 192.168.123.254**


Administrator: C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\Derick>ping 192.168.123.254
Pinging 192.168.123.254 with 32 bytes of data:
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Reply from 192.168.123.254: bytes=32 time<1ms TTL=64
Ping statistics for 192.168.123.254:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\Users\Derick>

  Jika tidak ada respon yang diterima, atau your alamat IP pada PC Anda tida sesuai dengan alamat IP dari Wireless Router. (Lihat instruksi berikut.)

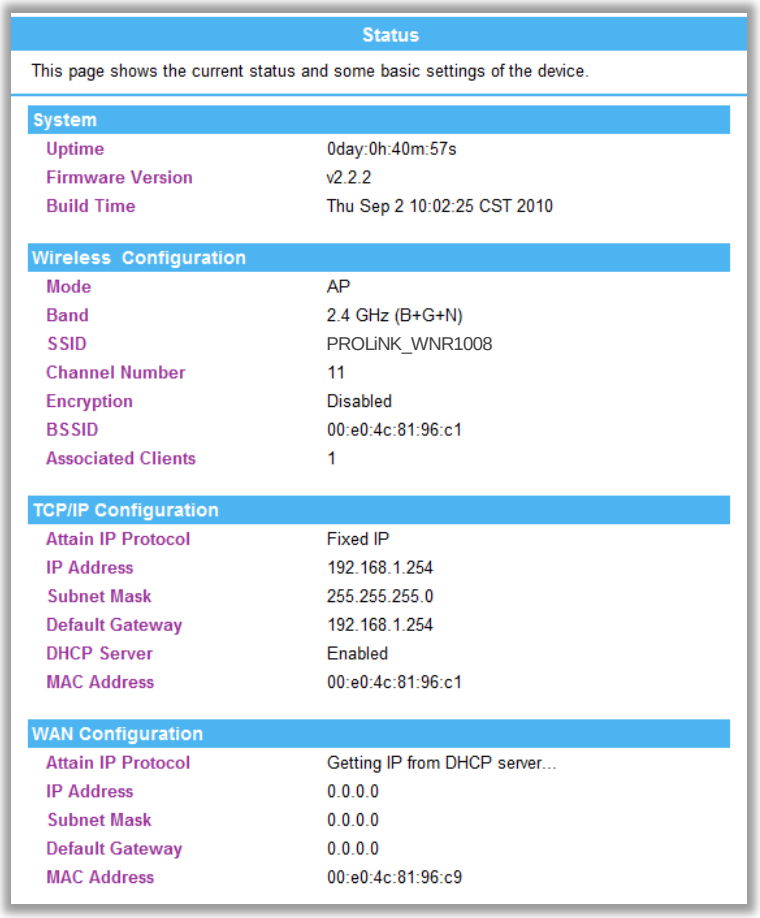
- Jika PC Anda menggunakan alamat IP statis, alamat IP harus berada antara 192.168.123.1 sampai 192.168.123.253 untuk dapat berkomunikasi dengan Wireless Router. Juga, Network *Mask* harus di set ke 255.255.255.0. Lihat *BAGIAN 4 - KONFIGURASI PC* untuk detail pengaturan TCP/IP.
- Pastikan PC dan Wireless Router Anda berada pada network segment yang sama. (Jika tidak Anda tidak memiliki router, ini yang akan terjadi.)
- Pastikan Anda menggunakan koneksi kabel LAN. Koneksi Wireless hanya dapat digunakan apabila pengaturan pada PC Anda sudah sama dengan pengaturan pada wireless.

Jenis Koneksi Umum

Jenis koneksi The Internet berdasarkan ISP (Internet Service Provider) yang dapat Anda gunakan.

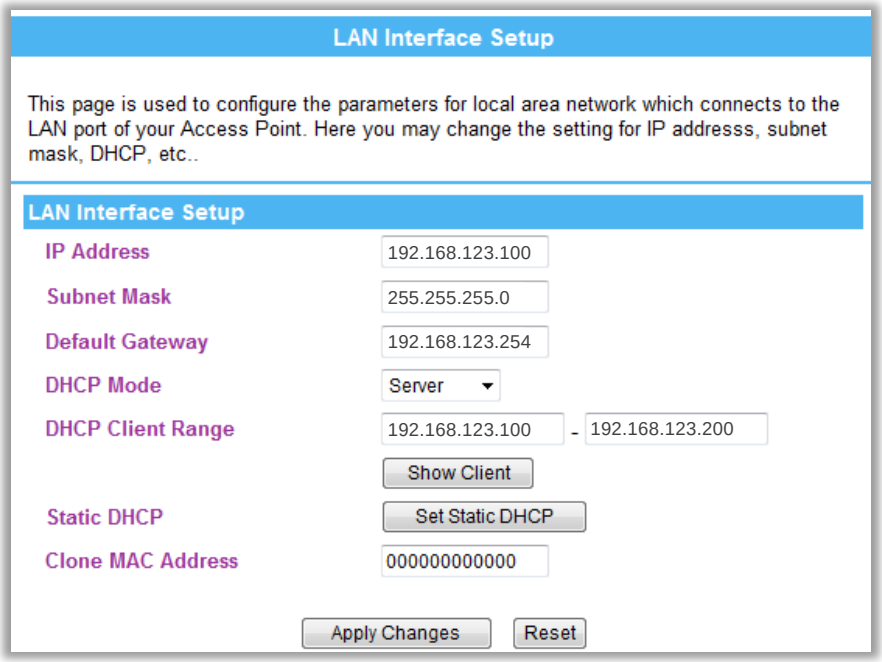
Jenis Modem	Jenis IP	Keterangan	Data ISP yang diperlukan
Cable Modem	Alamat IP Dynamic	Alamat IP Anda Your IP address ikan dialokasikan secara otomatis, ketika Anda terhubung dengan ISP.	Biasanya, tidak ada. Namun , beberapa ISP mungkin membutuhkan Hostname, Domain name, atau alamat MAC Anda.
	Alamat IP Static	ISP akan mengalokasikan alamat IP secara permanent kepada Anda.	Alamat IP akan dialokasikan . Namun , beberapa ISP mungkin membutuhkan Hostname, Domain name, atau alamat MAC Anda.
DSL Modem	Alamat IP Dynamic	Alamat IP Anda Your IP address ikan dialokasikan secara otomatis, ketika Anda terhubung dengan ISP.	Tidak Ada.
	Alamat IP Static	ISP akan mengalokasikan alamat IP secara permanent kepada Anda.	Alamat IP akan dialokasikan .
	PPPoE	You connect to the ISP only when required. The IP address is usually allocated automatically.	User name dan password.
Lainnya (contoh: 3.5G Wireless Card)	Alamat IP Dynamic	Alamat IP Anda Your IP address ikan dialokasikan secara otomatis, ketika Anda terhubung dengan ISP.	Biasanya, tidak ada. Namun , beberapa ISP mungkin membutuhkan Hostname, Domain name, atau alamat MAC Anda.

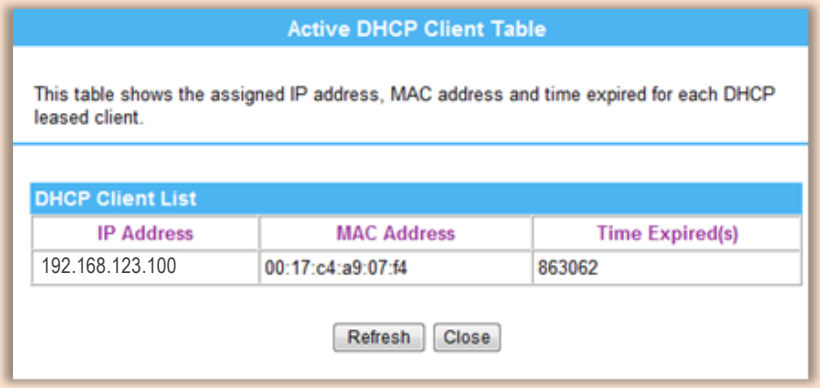
3.3. Status

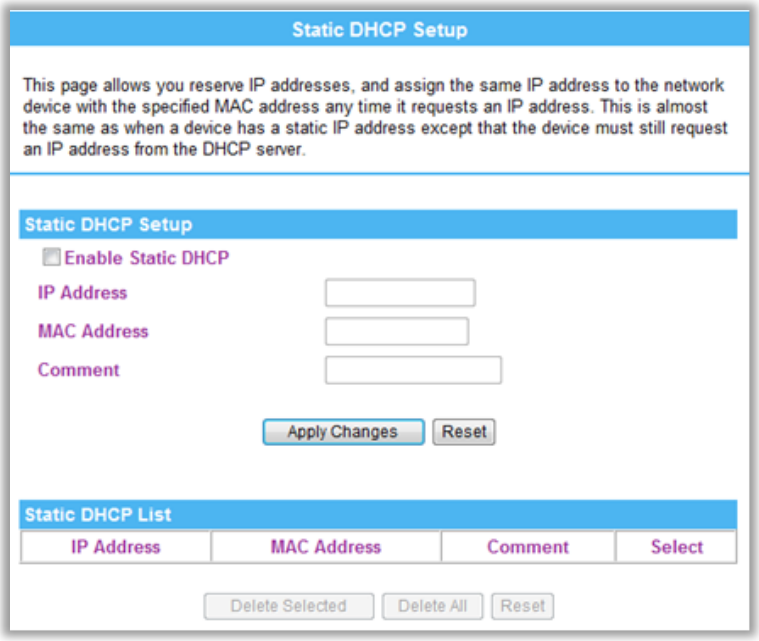


3.4. Network

Pengaturan Antarmuka LAN

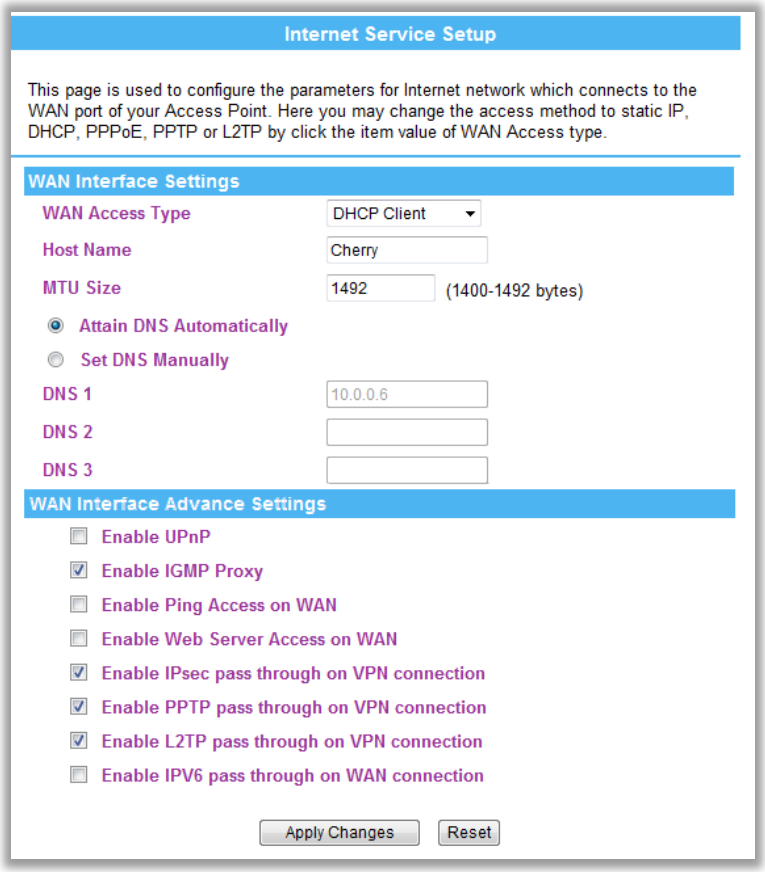


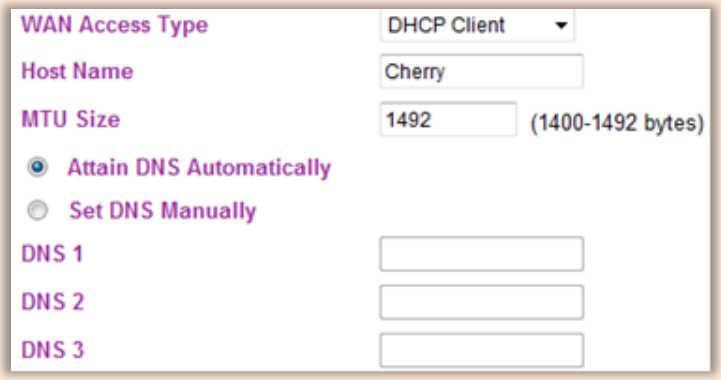
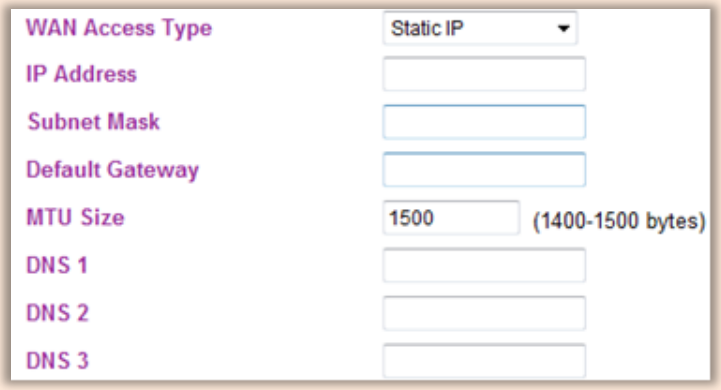
Item / Fungsi	Penjelasan/ Instruksi
IP Address	Menampilkan alamat IP dari Wireless Router (Alamat Default IP adalah 192.168.123.254)
Subnet Mask	Subnet mask dari Wireless Router (Default subnet mask adalah 255.255.255.0.)
Default Gateway	Menampilkan default gateway dari Wireless Router.
DHCP Mode	**Disable**: Pilih untuk menonaktifkan Router Wireless untuk mendistribusikan alamat IP ke klien yang terhubung. **Server**: Pilih untuk mengaktifkan Router Wireless untuk mendistribusikan alamat IP (DHCP Server) untuk klien yang terhubung. Dan kolom berikut akan diaktifkan bagi Anda untuk memasukkan alamat IP awal **Client**: Pilih mode client untuk menggunakan
DHCP Client Range	Alamat awal dari kumpulan jaringan alamat IP lokal. Pool adalah bagian dari segmen alamat IP, perangkat akan mendistribusikan alamat IP dari 192.168.123.100 sampai 192.168.123.200 ke semua komputer dalam jaringan yang permintaan alamat IP dari server DHCP (Router). Maksimum alamat akhir IP adalah 253. ***Catatan:*** Jika " alamat IP Continuous" yang ditetapkan mulai dari 192.168.123.1 dan "Jumlah alamat IP pada akhir pool" adalah 253, perangkat akan mendistribusikan alamat IP dari 192.168.123.100 sampai 192.168.123.253 ke semua komputer dalam jaringan yang permintaan alamat IP dari server DHCP (Router). Klik tombol **Show Client** untuk menampilkan **Active DHCP Client Table**. Tabel menampilkan alamat IP yang ditetapkan, alamat MAC dan waktu kadarluarsa untuk setiap client.  **Refresh**: Klik tombol ini untuk refresh tabel. **Close**: Klik tombol ini untuk menutup jendela.

Static DHCP	Centang kotak untuk mengaktifkan fungsi Static DHCP, pengaturan default adalah tidak aktif. Bila diaktifkan, pengguna dapat meng Klik tombol **Set Static DHCP** **untuk** mengatur fungsi **Static DHCP**  **IP Address**: Masukkan alamat IP statis untuk penggunaan alamat yang disediakan oleh DHCP Server. **MAC Address**: Masukkan alamat MAC untuk setiap station, lalu DHCP Server akan mendistribusikan alamat IP statis ke semua station secaa otomatis ketika terhubung. **Comment**: Anda dapat memasukkan komentar untuk alamat IP atau alamat MAC. **Apply Changes:** Setelah selesai melakukan pengaturan, Klik tombol Apply changes untuk menyimpan. **Reset:** Klik Reset untuk mengembalikan pengaturan sebelumnya. **Static DHCP List**: Menampilkn alamat IP statis yang telah ditetapkan berdasarkan alamat MAC. **Delete Selected**: Klik Delete Selected untuk menghapus item. **Delete All**: Klik tombol **Delete All** untuk menghapus semua item.
Clone MAC Address	Tabel ini menampilkan informasi MAC.

Static DHCP Setup
This page allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.
Static DHCP Setup
Enable Static DHCP
IP Address
MAC Address
Comment
Apply Changes
Reset
Static DHCP List
IP Address
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

Internet Service Setup


Internet Service Setup
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, PPTP or L2TP by click the item value of WAN Access type.
WAN Interface Settings
WAN Access Type
DHCP Client
Host Name
Cherry
MTU Size
1492
(1400-1492 bytes)
Attain DNS Automatically
Set DNS Manually
DNS 1
10.0.0.6
DNS 2
DNS 3
WAN Interface Advance Settings
Enable UPnP
Enable IGMP Proxy
Enable Ping Access on WAN
Enable Web Server Access on WAN
Enable IPsec pass through on VPN connection
Enable PPTP pass through on VPN connection
Enable L2TP pass through on VPN connection
Enable IPV6 pass through on WAN connection
Apply Changes
Reset

Item / Fungsi	Penjelasan/ Instruksi
WAN Access Type	Pilih jenis WAN Access **Static IP, DHCP Client, PPPoE,** atau **Mobile Networks** dari menu pull-down. Pengaturan Default adalah **DHCP (Auto Config)**. **DHCP Client**  Jika DHCP Client yang dipilih, router akan memperoleh alamat IP secara otomatis. **Hostname:** Masukkan hostname untuk menetapkan alamat IP ke computer Anda. Maximum 32 alphanumeric karakter (case sensitive). **MTU Size:** MTU (Maximum Transmission Unit), nilai default adalah 1492 untuk aplikasi Anda. Mengurangi ukuran paket dapat membantu menghubungkan ke situs web tertentu atau mempercepat laju paket transfer. Jika ukuran paket salah dimasukkan, Anda mungkin tidak dapat membuka situs web tertentu. Pilih **Attain DNS Automatically** atau pilih **Set DNS Manually** untuk menset alamat IP dari DNS server. Pengaturan Default adalah **Attain DNS Automatically**. **DNS 1**: Masukkan alamat IP untuk DNS server yang disediakan oleh ISP, atau Anda dapat mengisi alamat IP yang Anda tahu pada kolom preferred DNS server . **DNS 2~3:** Kolom ini adalah opsi. Anda juga dapat mengisi alamat IP pada kolom ini. DNS 2 dan 3 servers akan terpakai bila DNS 1 server gagal. **Static (Fixed IP)**  Jika alamat IP statis dipilih, pengguna harus menetapkan alamat IP, subnet mask dan default gateway yang didapat dari ISP (Internet Service Provider). **IP Address:** Masukkan alamat IP WAN IP yang disediakan oleh ISP. **Subnet Mask:** Masukkan subnet mask. **Default Gateway:** Masukan alamat IP untuk default gateway yang disediakan oleh ISP.

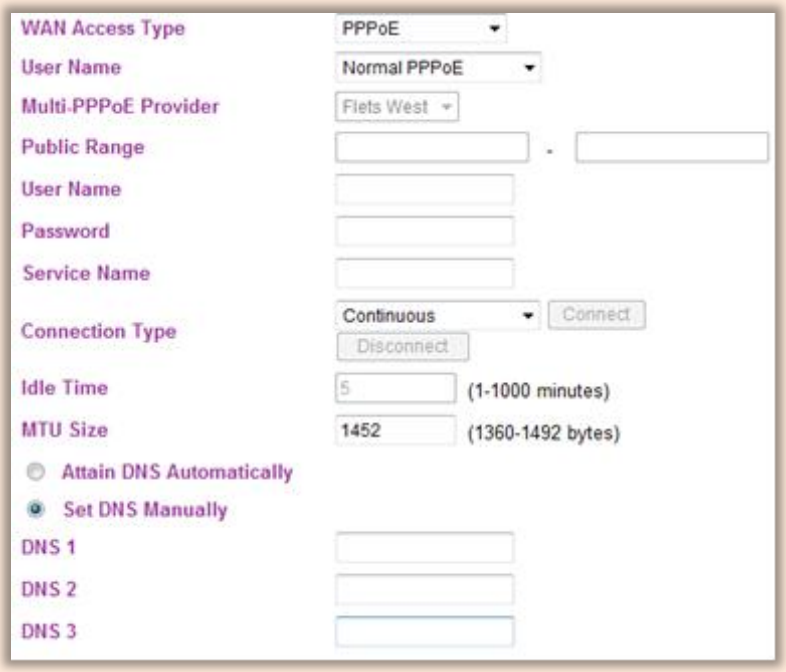
MTU Size: MTU (Maximum Transmission Unit), nilai default adalah 1492 untuk aplikasi Anda. Mengurangi ukuran paket dapat membantu menghubungkan ke situs web tertentu atau mempercepat laju paket transfer. Jika ukuran paket salah dimasukkan, Anda mungkin tidak dapat membuka situs web tertentu.

Pilih **Attain DNS Automatically** atau pilih **Set DNS Manually** untuk menset alamat IP dari DNS server. Pengaturan Default adalah **Attain DNS Automatically**.

DNS 1: Masukkan alamat IP untuk DNS server yang disediakan oleh ISP, atau Anda dapat mengisi alamat IP yang Anda tahu pada kolom preferred DNS server .

DNS 2~3: Kolom ini adalah opsi. Anda juga dapat mengisi alamat IP pada kolom ini. DNS 2 dan 3 servers akan terpakai bila DNS 1 server gagal.will be used when the DNS 1 server fails.

PPPoE



Jika PPPoE yang dipilih, pengguna harus mengisi user name dan password yang disediakan oleh ISP.

PPPoE Type: Pilih jenis PPPoE, Nataumal PPPoE, Multiple PPPoE dan Unnumbered PPPoE dari menu pull-down.

Multi-PPPoE provider: Jika pengguna memilih jenis Multiple PPPoE, pengguna harus mengisi PPPoE disini. Pilih Flets West, Next West, Flets East, dan Flets Next dari menu pull-down.

Public Range: Jika pengguna memilih jenis Unnumbered PPPoE, harus mengisi range disini.

User Name: Masukkan username yang disediakan oleh ISP (Internet Service Provider). Maximum input 32 alphanumeric karakter case sensitive).

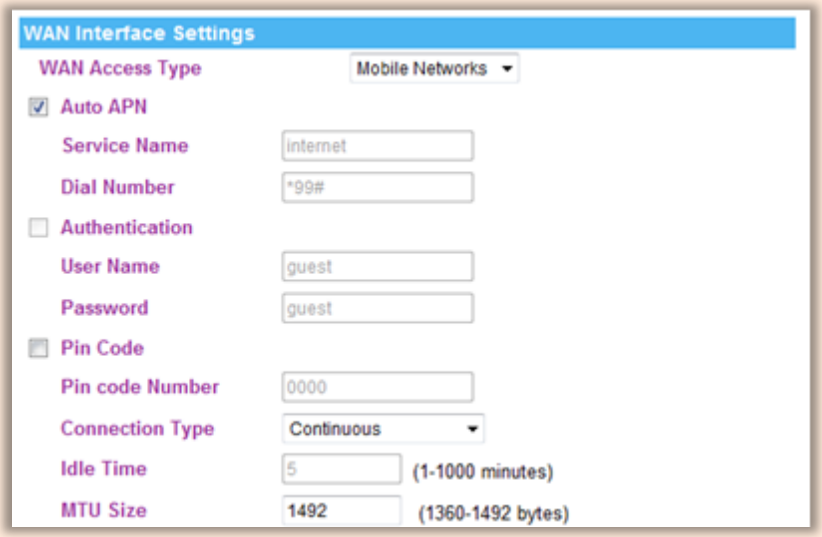
Password: Masukkan password yang disediakan oleh ISP. Maximum input 32 alphanumeric karakter (case-sensitive).

Service Name: Masukkan nama Internet service provider disini.

Connection Type: Pilih jenis koneksi **Continuous**, **Connect on Demdan** atau **Manual** dari menu pull-down. Jika memilih **Manual** pengguna dapat meng Klik tombol **Connect** untuk melakukan koneksi.

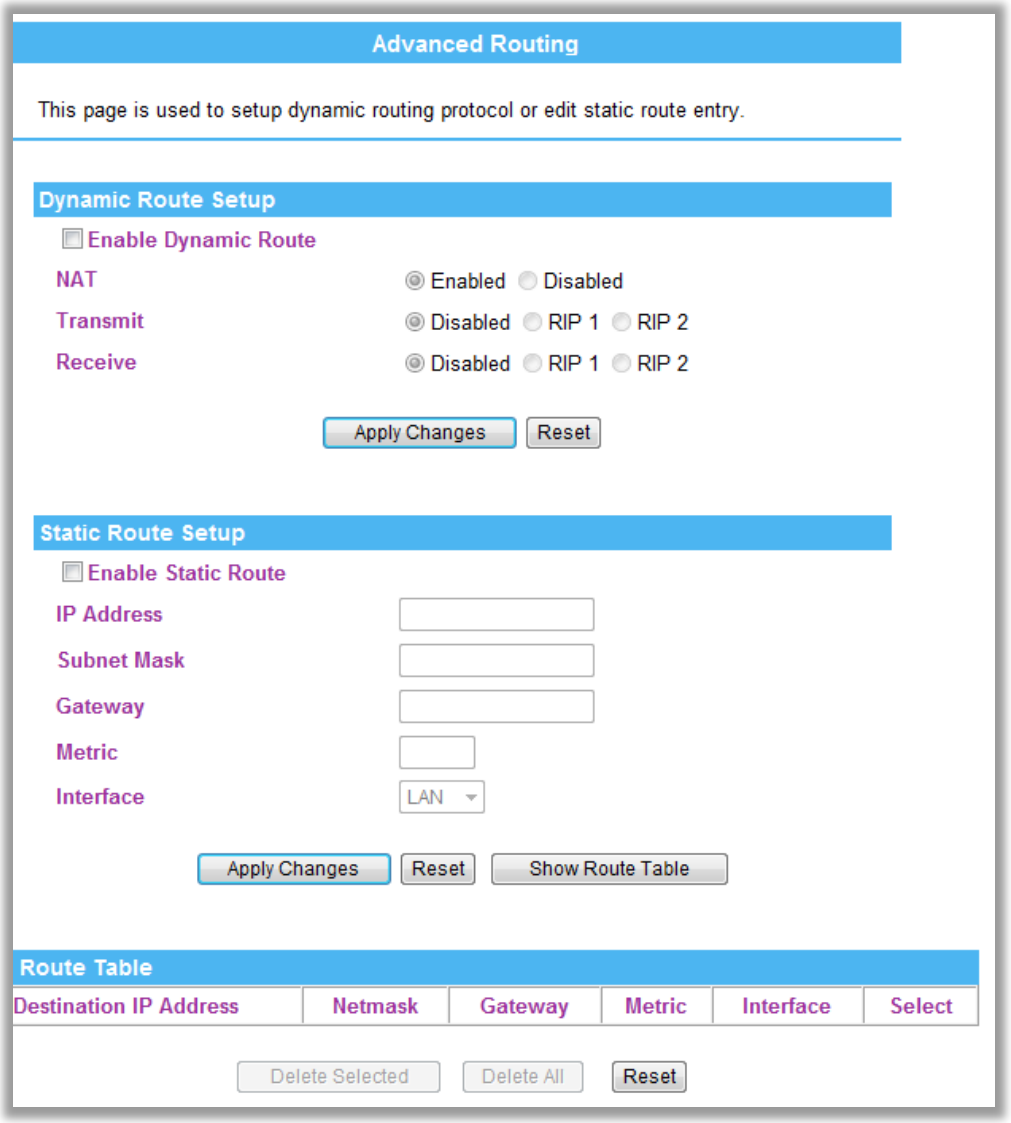
Idle Time: Menampilkan perangkat diam setelah waktu yang Anda tentukan. Pengaturan waktu antara 1~1000 menit. Nilai Default adalah 5 menit. Fungsi ini tersedia jika **Connection Type** yang digunakan adalah **Connection Demdan**.

MTU Size: MTU (Maximum Transmission Unit), nilai default adalah 1492 untuk aplikasi Anda. Mengurangi ukuran paket dapat membantu menghubungkan ke situs web tertentu atau mempercepat laju paket transfer. Jika ukuran paket salah dimasukkan, Anda mungkin tidak dapat membuka situs web tertentu.

	Mobile Networks  **Pengguna harus menyisipkan USB card yang disediakan oleh provider ke dalam port USB pada wireless router untuk dapat menggunakan fungsi Mobile networks.** **Auto APN:** APN (Access Point Name.) Jika fungsi ini dipilih, system akan mendeteksi secara otomatis pengaturan mobile network melalui USB yang disediakan oleh Internet service provider (ISP). Menggunakan pengaturan default sangat direkomendasi. **Service Name**: Gunakan pengaturan default atau masukkan nama service yang disediakan oleh ISP. **Dial Number**: Gunakan pengaturan default atau masukkan nomatau dial yang disediakan oleh ISP. **Authentication**: Centang kotak untuk mengaktifkan fungsi authentication. ● **User Name**: Masukkan user name yang disediakan oleh ISP. ● **Password**: Masukkan password yang disediakan oleh ISP. **Pin code**: Gunakan pengaturan default atau masukkan SIM card Pin code yang disediakan oleh ISP. **Connection Type**: Pilih jenis koneksi **Continuous**, **Connect on Demdan** dari menu pull-down. **Idle Time**: Menampilkan perangkat diam setelah waktu yang Anda tentukan. Pengaturan waktu antara 1~1000 menit. Nilai Default adalah 5 menit. Fungsi ini tersedia jika **Connection Type** yang digunakan adalah **Connection Demdan**. **MTU Size**: MTU (Maximum Transmission Unit), nilai default adalah 1492 untuk aplikasi Anda. Mengurangi ukuran paket dapat membantu menghubungkan ke situs web tertentu atau mempercepat laju paket transfer. Jika ukuran paket salah dimasukkan, Anda mungkin tidak dapat membuka situs web tertentu.
Enable uPNP…	Centang kotak untuk mengaktifkan fungsi.
Apply	Setelah selesai membuat pengaturan, Klik tombol **Apply** untuk menyimpan.
Cancel	Klik **Cancel** untuk mengembalikan ke nilai default.

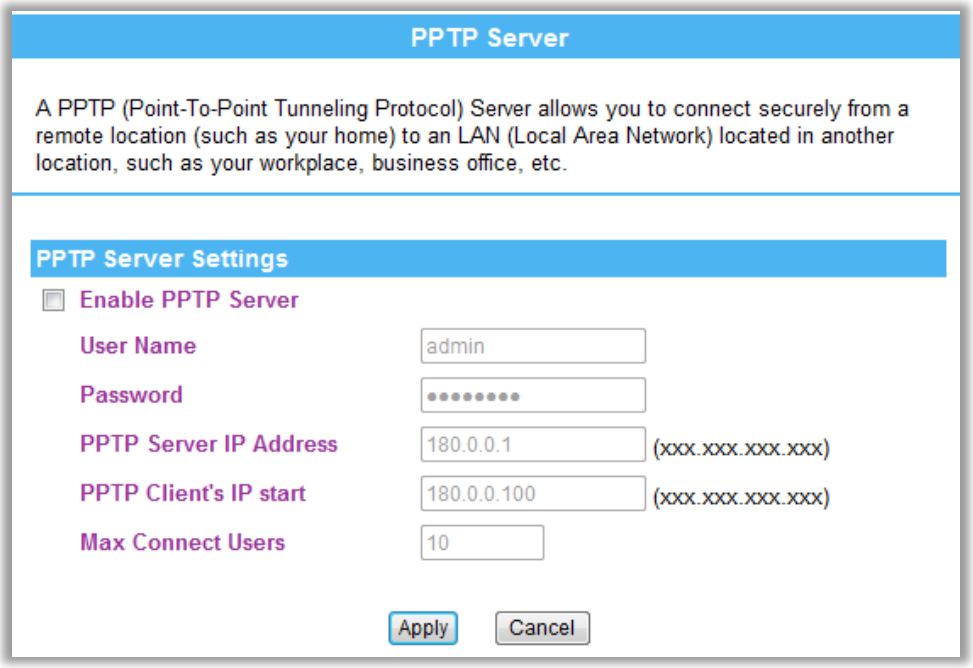
Advanced Routing

Jika Anda menghubungkan beberapa router dengan Wireless Router, Anda mungkin perlu mengatur aturan routing yang telah ditetapkan agar lalu lintas data lebih efektif yang disebut rute statis antara router dan Wireless Router.



Item / Fungsi	Penjelasan/ Instruksi
Enable Dynamic Route	Centang untuk mengaktifkan fungsi dynamic router. **NAT:** Pilih untuk mengaktifkan fungsi network address translation. **Transmit:** Pilih untuk menggunakan Routing Information Protocol, Fungsi ini akan memilih packet transmitting route yang melewati beberapa router. **Receive:** Pilih untuk menggunakan Routing Information Protocol, Fungsi ini akan memilih packet receiving route yang melewati beberapa router.
Enable Static Route	**IP address:** Masukkan alamat IP Gateway. **Subnet Mask:** Masukkan subnet mask Gateway. **Gateway:** Masukkan nama gateway atau nama domain. **Metric:** Rute dengan metric terendah yang menjadi jalur utama. **Interface:** Pilih untuk menggunakan **LAN** atau **WAN** sebagai antarmuka fisik dimana paket akan dikirim.
Destination	Alamat Jaringan dari segmen LAN tujuan. Ketika sebuah paket dengan alamat tujuan IP yang cocok untuk bidang ini, akan rute ke perangkat mengatur di bidang Rute Gateway.
Range	Pilih **Host** atau **Net** dari menu pull-down. Jika memilih Net, harap masukkan **Netmask** pada kolom ini.
IP address	Masukkan alamat IP Gateway.
Interface	Anda dapat
Comment	Masukkan cacatan disini.
Apply	Setelah selesai membuat pengaturan, Klik tombol **Apply** untuk menyimpan.
Reset	Klik **Cancel** untuk mengembalikan ke nilai default.

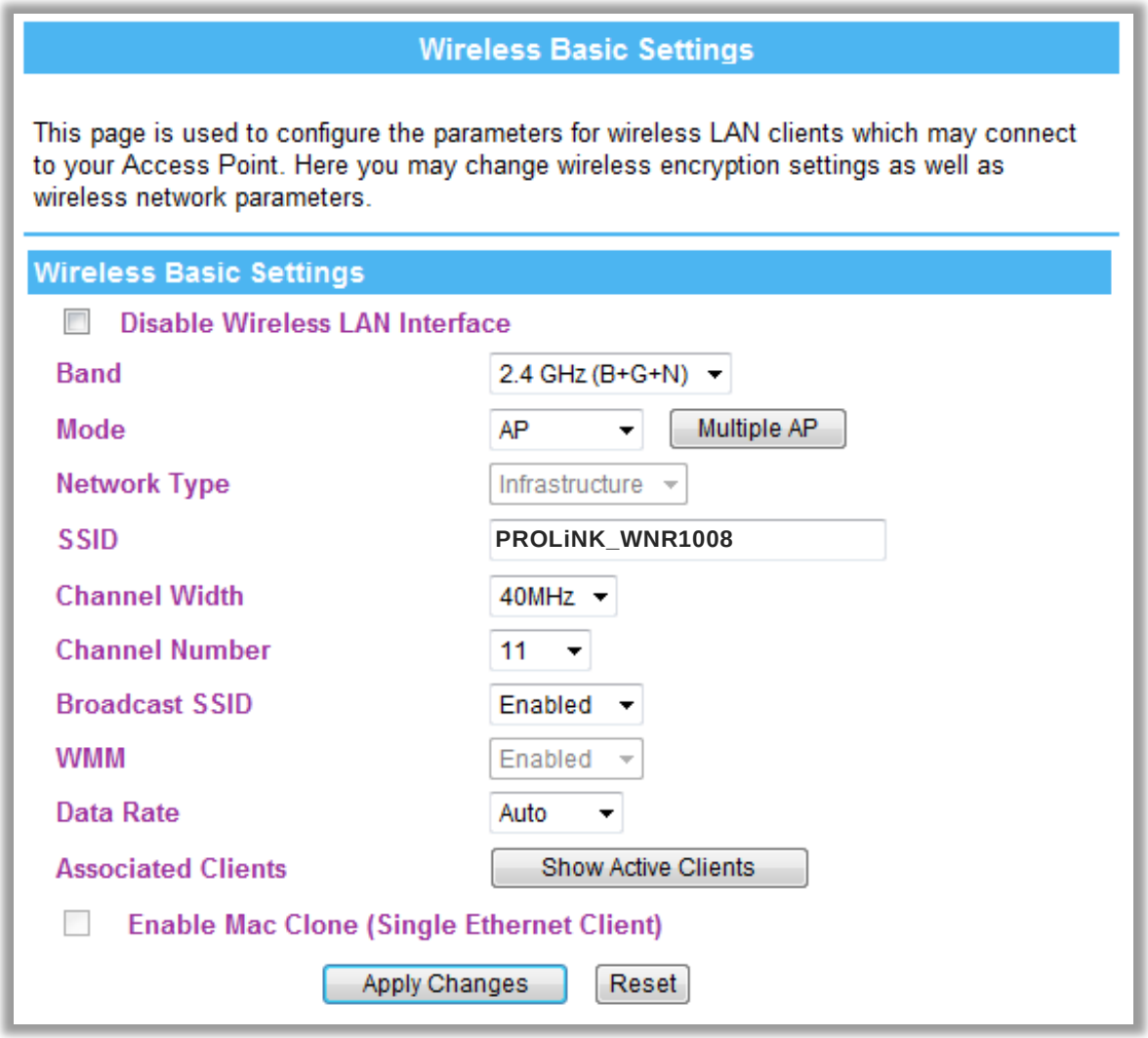
PPTP Server



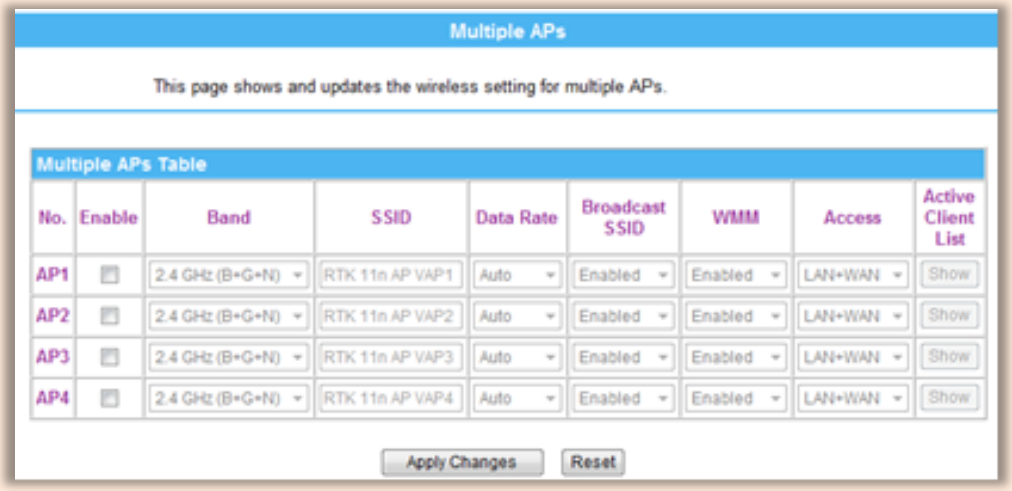
Item / Fungsi	Penjelasan/ Instruksi
Enable PPTP Server	Centang untuk mengaktifkan fungsi PPTP server, fungsi ini memungkinkan Anda untuk terhubung ke lokasi lain dengan aman memalui internet.
User Name	Masukkan username, ketika PPTP client mencoba untuk terhubung ke PPTP sever akan menggunakan username ini.
Password	Masukkan password, ketika PPTP client mencoba untuk terhubung ke PPTP sever akan menggunakan password ini.
PPTP Server IP address	Masukkan alamat IP dari PPTP server.
PPTP Client's IP Start	Masukkan alamat IP Start.
Max Connect Users	Masukkan jumlah maksimum akses oleh PPTP client.

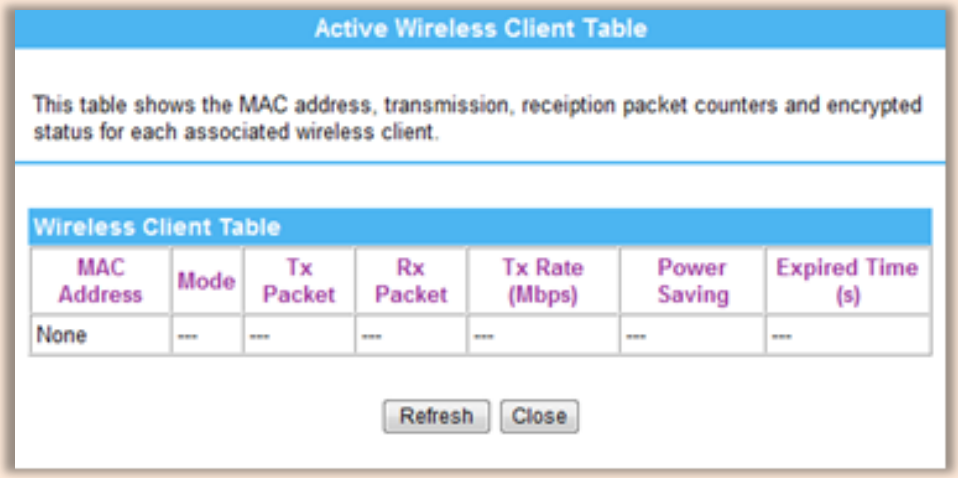
3.5. Wireless

Basic

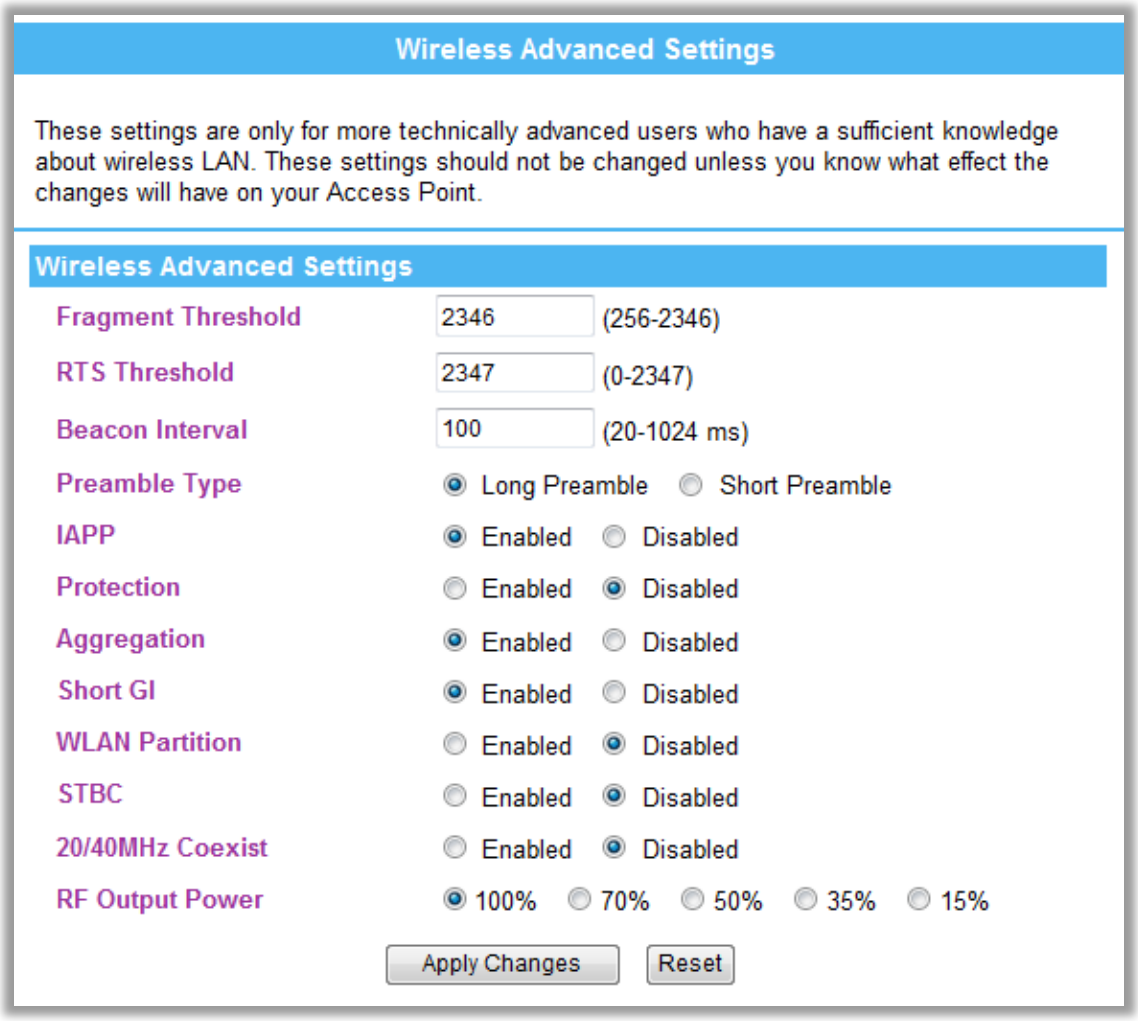


Item / Fungsi	Penjelasan/ Instruksi
Disable Wireless LAN Interface	Centang untuk men nonaktifkan fungsi wireless. Jika antarmuka wireless LAN di non aktifkan, lampu LED WLAN akan mati.
Bdan	Anda dapat memilih satu modus yang Anda inginkan. ● Mendukung 2.4GHz (**B):** 802.11b saja. ● Mendukung 2.4GHz (**G):** 802.11g saja. ● Mendukung 2.4GHz (**N):** 802.11n saja. ● Mendukung 2.4GHz (**B+G):** mendukung 802.11b dan 802.11g saja. ● Mendukung 2.4GHz (**G+N):** mendukung 802.11g dan 802.11n saja. ● Mendukung 2.4GHz (**B+G+N):** 802.11b, 802.11g dan 802.11n. Default adalah modus 2.4GHz (**B+G+N**).
Mode	Di bawah modus operasi Router, pengguna dapat memilih AP, WDS, dan AP + WDS dari menu pull-down. Untuk mode AP, pengguna dapat memilih AP, Client, WDS dan mode AP + WDS. Dalam mode client, hanya ada modus Klien yang dapat dipilih. **Multiple APs** Pada halaman ini menampilkan dan update pengaturan nirkabel untuk multiple APs.

<table>
<tr><td></td><td> 

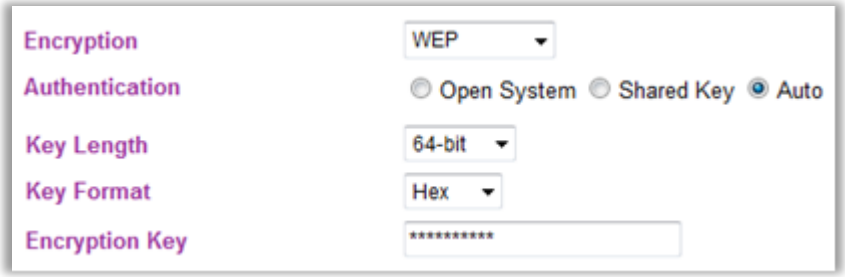
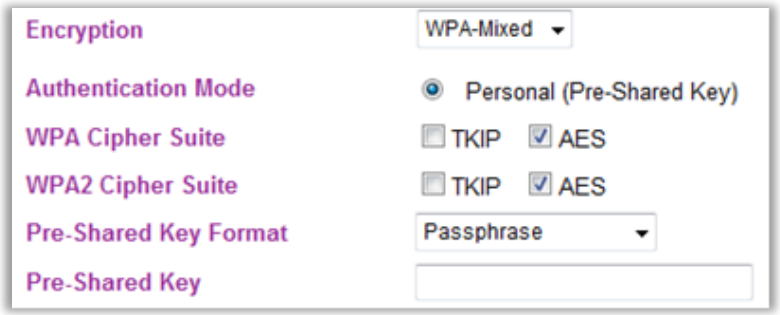
Pengguna dapat mengatur multiple AP disini.</td></tr>
<tr><td>Network Type</td><td>Jika mode diatur ke modus AP atau klien bahwa jenis jaringan yang dapat diatur untuk Infrastruktur atau Ad hoc</td></tr>
<tr><td>SSID</td><td>SSID (Service Set Identifier) yang disebut nama jaringan karena pada dasarnya itu adalah nama yang mengidentifikasi jaringan nirkabel (case-sensitif).</td></tr>
<tr><td>Channel Width</td><td>Pilih 20MHz/40MHz lebar channel, nomatau channel diantara 5~11 dan auto; Pilih 20MHz lebar channel maka nomatau channel diantara 1~11 dan auto. Default adalah 20MHz/40MHz.</td></tr>
<tr><td>Channel Selection</td><td>Nomatau channel bedasarkan lebar channel yang Anda pilih.</td></tr>
<tr><td>Broadcast SSID</td><td>Enabled: Wireless AP akan broadcast SSID ke semua station.
Disabled: Wireless AP tidak akan broadcast SSID ke semua station. Jika station ingin melakukan koneksi dengan wireless AP, nama SSID yang diketahui untuk membuat sebuah koneksi.</td></tr>
<tr><td>WMM</td><td>Fungsi WiFi Multiple Media tersedia pada 2.4GHz (B), 2.4GHz (G) dan 2.4GHz (B+G), dan disabled pada 2.4GHz (N), 2.4GHz (G+N) dan 2.4GHz (B+G+N).</td></tr>
<tr><td>Data Rate</td><td>Ada beberapa data rate yang dapat Anda pilih pada menu pull-down.</td></tr>
<tr><td>Associated Clients</td><td>Klik tombol Show Active Clients untuk melihat semua client yang aktif.
 
</td></tr>
<tr><td>Enable Mac Clone (Single Ethernet Client)</td><td>Fungsi ini akan aktif pada modus Client.</td></tr>
</table>

Advanced

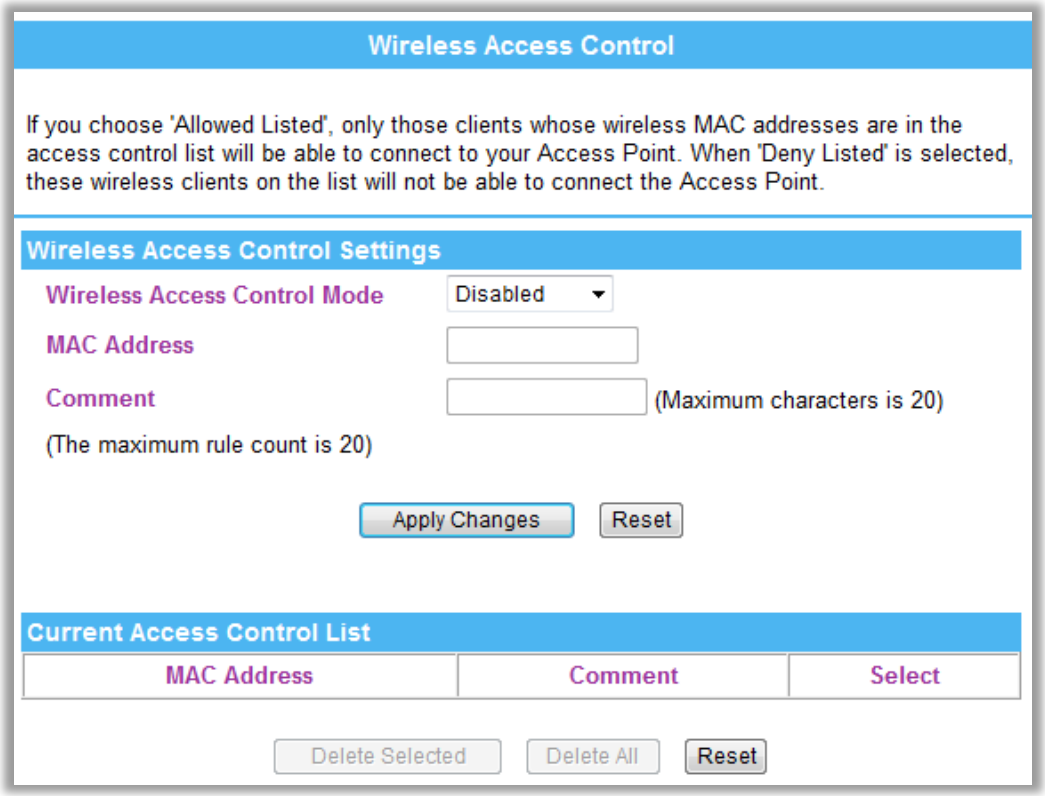

Wireless Advanced Settings
These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.
Wireless Advanced Settings
Fragment Threshold 2346 (256-2346)
RTS Threshold 2347 (0-2347)
Beacon Interval 100 (20-1024 ms)
Preamble Type Long Preamble Short Preamble
IAPP Enabled Disabled
Protection Enabled Disabled
Aggregation Enabled Disabled
Short GI Enabled Disabled
WLAN Partition Enabled Disabled
STBC Enabled Disabled
20/40MHz Coexist Enabled Disabled
RF Output Power 100% 70% 50% 35% 15%
Apply Changes
Reset

Item / Fungsi	Penjelasan/ Instruksi
Fragment Threshold	Mekanisme Fragmentasi digunakan untuk meningkatkan efisiensi ketika lalu lintas yang tinggi mengalir sepanjang dalam jaringan nirkabel. Jika MIMO 802.11g Wireless Router sering mengirimkan file besar di jaringan nirkabel, Anda dapat memasukkan nilai baru Fragmen Threshold untuk membagi paket. Nilai ini dapat diatur 256-2346. Nilai default adalah 2346.
RTS Threshold	RTS Threshold adalah mekanisme diimplementasikan untuk mencegah masalah "Hidden Node". Jika masalah "Hidden Node" adalah masalah, silakan menentukan ukuran paket. Mekanisme RTS akan diaktifkan jika ukuran data yang melebihi nilai yang sudah diset. Peringatan: Mengaktifkan RTS Threshold akan menyebabkan overhead jaringan redundan yang negatif dapat mempengaruhi kinerja throughput. Nilai ini harus tetap pada pengaturan default 2347. Jika Anda mengalami aliran data tidak konsisten, hanya modifikasi kecil dari nilai ini direkomendasikan.
Beacon Interval	Beacon Interval adalah jumlah waktu antara transmisi beacon. Sebelum stasiun memasuki mode penghematan daya, stasiun membutuhkan interval sinyal untuk mengetahui kapan harus bangun untuk menerima sinyal tersebut. Range diantara 20-1024ms, default adalah 100.
Preamble Type	A preamble is a signal used in wireless environment to synchronize the transmitting timing including Synchronization dan Start frame delimiter. You can select Long atau Shataut for the preamble type. Preamble adalah sinyal yang digunakan dalam lingkungan nirkabel untuk menyinkronkan waktu transmisi termasuk Sinkronisasi dan pembatas frame mulai. Anda dapat memilih panjang atau pendek untuk jenis preamble.
IAPP	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
Protection	Pilih Enabled atau Disabled untuk menjalankan fungsi keamanan.
Aggregation	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
Shataut GI	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
WLAN Partition	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
STBC	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
20/40MHz Coexist	Pilih Enabled atau Disabled untuk menjalankan fungsi ini.
RF Output Power	Pilih transmitting power rate 100%, 70%, 50%, 35%, 15%.

Security

Item / Fungsi	Penjelasan/ Instruksi
Pilih SSID	Pilih SSID (Service Set Identifier) untuk membuat pengaturan security pada menu pull-down.
Encryption	Ada beberapa jenis modus encryption termasuk **Disabled**, **WEP (Open System), WEP (Shared Key), WEP (AUTO), WPA (Personal), WPA2 (Personal)**, dan **WPA-Mixed**. Pengaturan default security adalah Disabled. Sangat direkomendasikan untuk menggunakan modus security untuk mencegah pengguna yang tidak dikenal. **Catatan:** ➢ AUTO (Open/Shared) berarti AP dapat menerima client untuk terhubung menggunakan OPEN-WEP atau SHARED-WEP. **WEP**  **Authentication:** Pilih Open System, Shared Key atau Auto. **Key Length:** Pilih key length 64-bit atau 128-bit. **Key Format:** ● **Hexadecimal (WEP 64 bits):** 10 Hex karakters (0~9, a~f). ● **Hexadecimal (WEP 128 bits):** 26 Hex karakters (0~9, a~f). ● **ASCII (WEP 64 bits):** 5 ASCII karakters (case-sensitive). ● **ASCII (WEP 128 bits):** 13 ASCII karakters (case-sensitive). **Encryption Key:** Masukkan key pada kolom pengaturan. **WPA-PSK/ WPA2-PSK/ WPA-PSK WPA2-PSK**  **Authentication Mode**: Pilih Enterprise (RADIUS) atau Modus Personal (Pre-Shared Key). **WPA Cipher Suite:** ini mendukung AES saja. **WPA2 Cipher Suite:** ini mendukung AES saja. **Pre-Shared Key Format:** Memiliki pilihan untuk set Pre-shared key, **Passphrase** dan **Hex (64 karakters)**. Jika **Hex** yang dipilih, pengguna harus memasukkan 64 karakter. Untuk pengaturan yang lebih mudah, **Passphrase** (minimum 8 karakter) yang direkomendasi. **Pre-Shared Key :** Pre-Shared Key berfungsi sebagai password. Pengguna harus memasukkan 8 sampai 63 karakter string jika Anda memilih passphrase. Pastikan password yang sama digunakan olh client untuk melakukan koneksi.

ACL


Wireless Access Control
If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
Wireless Access Control Settings
Wireless Access Control Mode
Disabled
MAC Address
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current Access Control List
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

Item / Fungsi	Penjelasan/ Instruksi
Wireless Access Control Mode	Pilih **Allow Listed** atau **Deny Listed** dari menu pull-down untuk mengaktifkan fungsi access control. Pengaturan Default adalah **Disabled**.
MAC Address	Masukkan alamat MAC (12 karakter) dari station yang boleh mengakses Access Point ini.
Comment	Ana bias memasukkan 20 karakter sebagai deskripsi alamat MAC.
Current Access Control List	Tabel ini menampilkan informasi MAC pada client.
Delete choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua item.
Reset	Klik **Reset** untuk meeset.

WDS

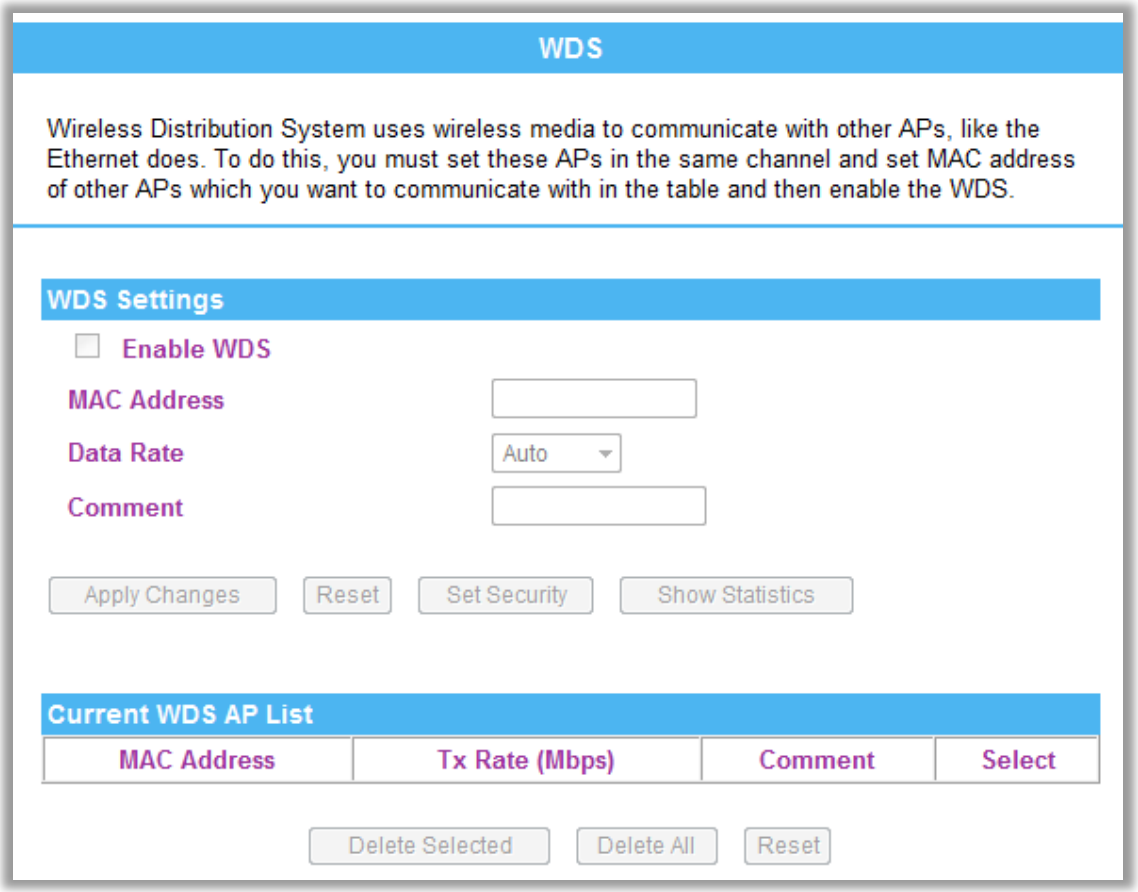
Wireless Distribution System menggunakan media wireless untuk berkomunikasi dengan AP lainnya, seperti Ethernet. Untuk melakukan ini, Anda harus mengatur ini AP yang ada di saluran yang sama dan menetapkan alamat MAC dari AP lain yang Anda ingin berkomunikasi dengan dalam tabel dan kemudian mengaktifkan WDS.

Untuk menggunakan fungsi WDS:

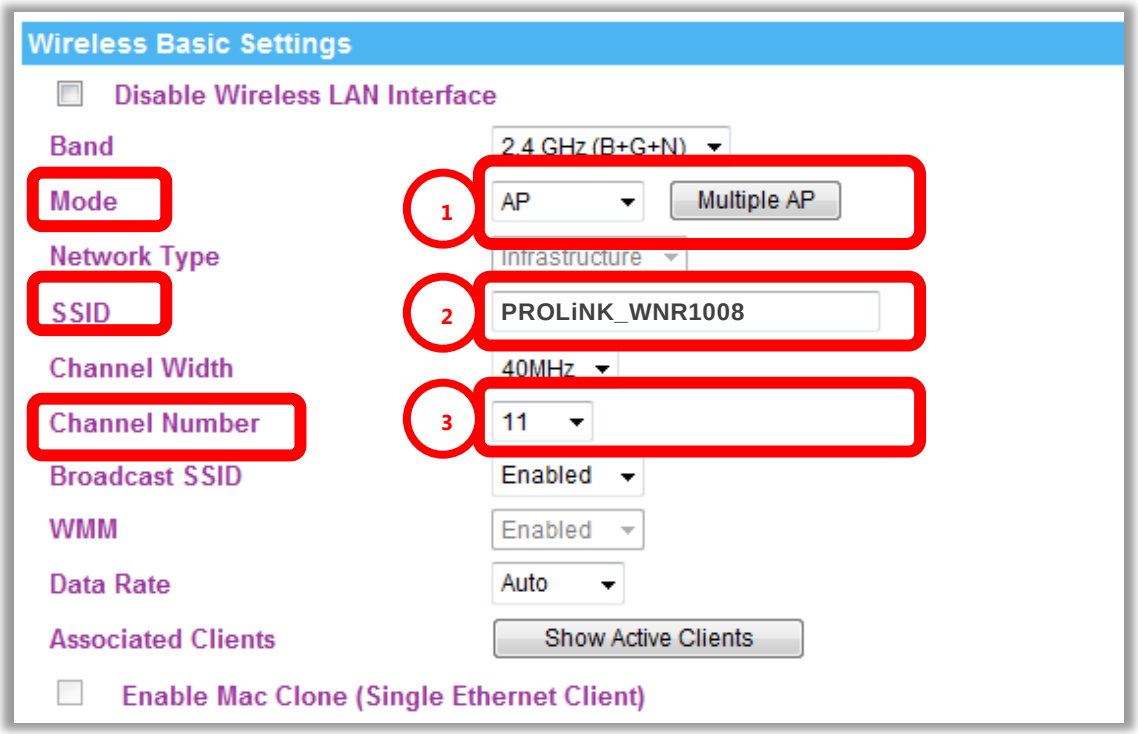
1. AP harus mendukung fungsi WDS.
2. SSID harus sama (Nama Network).
3. Channel harus sama.
4. Memasukkan alamat Wireless MAC (BSSID) pada AP.
5. Meggunakan security yang sama (WEP atau WPA) pada AP.

Catatan !

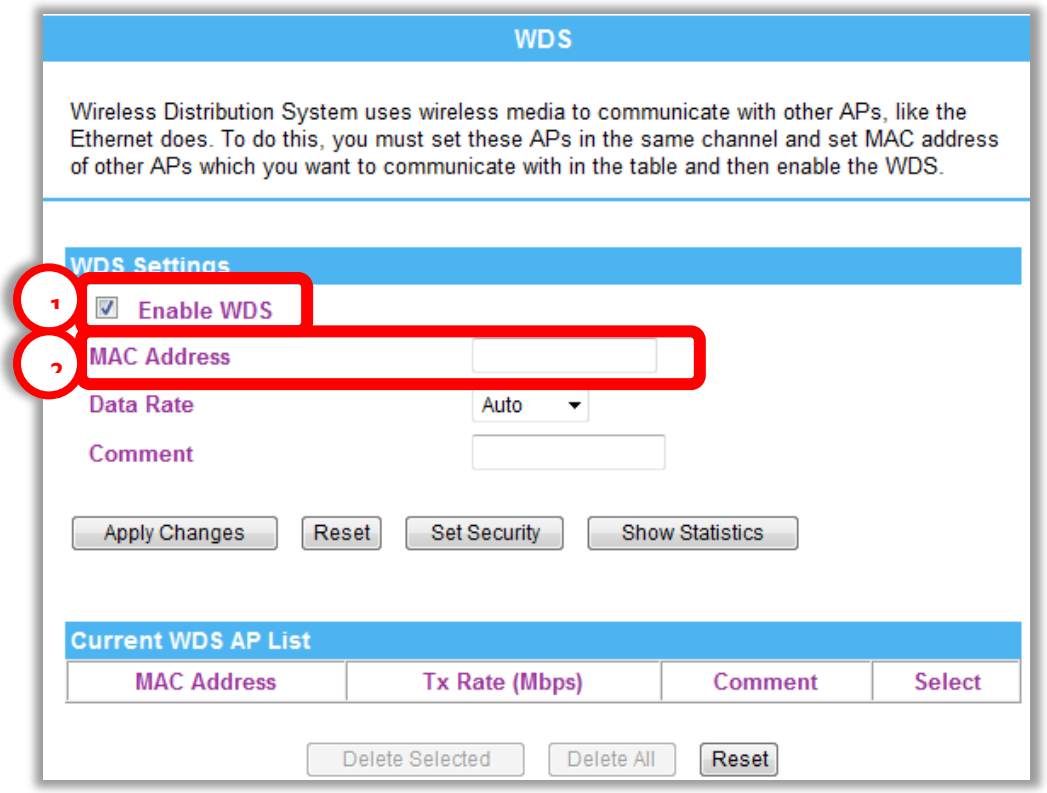
Untuk menjalankan WDS harus menggunakan produk wireless yang sama (model yang sama lebih baik);karena dua produk wireless yang berbeda mungkin mendukung pengaturan WDS yang berbeda. Dengan demikian, meggunakan produk wireless yang sama akan mendukung fungsi yang sama.

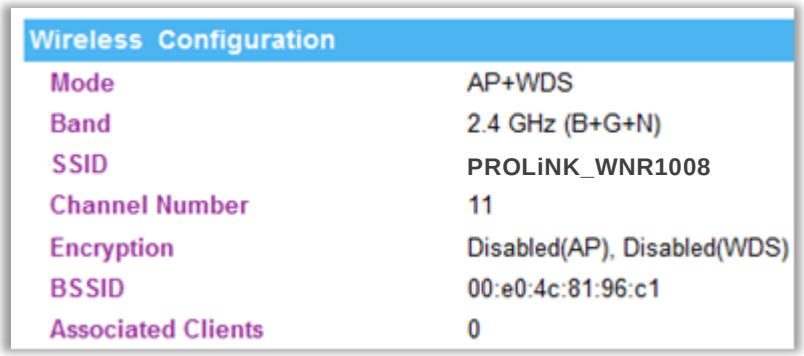

WDS
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
WDS Settings
Enable WDS
MAC Address
Data Rate
Auto
Comment
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

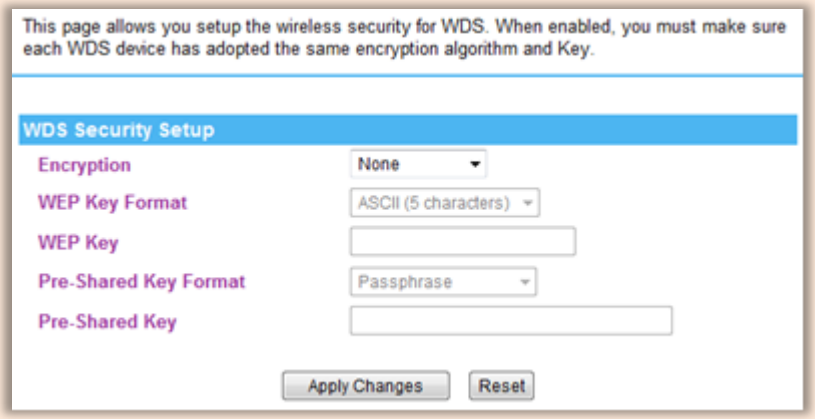
Step 1. Pengguna ingin menggunakan fungsi WDS, silahkan ke halaman **Wireless > Basic** untuk memilih modus **WDS** atau **AP+ WDS** (Repeater), dan buat AP dengan **Network Name (SSID)** dan **Channel** yang sama. Setelah selesai, klik tombol **Apply Changes**.



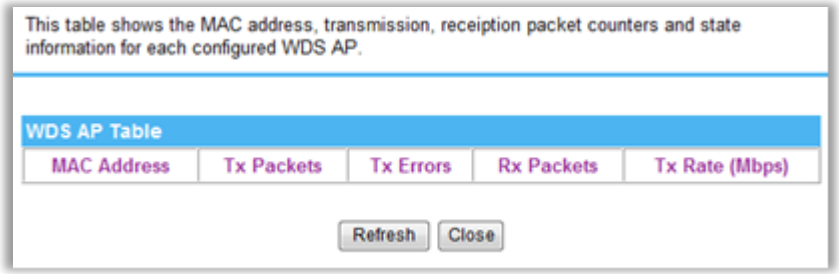
Step 2. Lalu pergi ke **Wireless > WDS** (1) untuk mengaktifkan fungsi WDS dan (2) masukkan alamat **Wireless MAC** (silahkan pergi ke **Status> Wireless Configuration** untuk memastikan alamat **BSSID**) untuk setiap AP yang merupakan bagian dari WDS. Klik tombol **Apply**.



Item / Fungsi	Penjelasan/ Instruksi
Enable WDS	Centang untuk mengaktifkan fungsi WDS.
MAC Address	**MAC Address**: Masukkan Wireless BSSID (MAC) 12 karakter dari wireless AP yang ingin Anda hubungkan. silahkan pergi ke **Status> Wireless Configuration** untuk memastikan alamat **BSSID**) 
Data Rate	Pilih data rate dari menu pull-down.
Comment	Masukkan deskripsi untuk perangkat.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Set Security	Mengaktifkan fungsi WDS lalu Klik tombol **Set Security** untuk membuat WDS security.

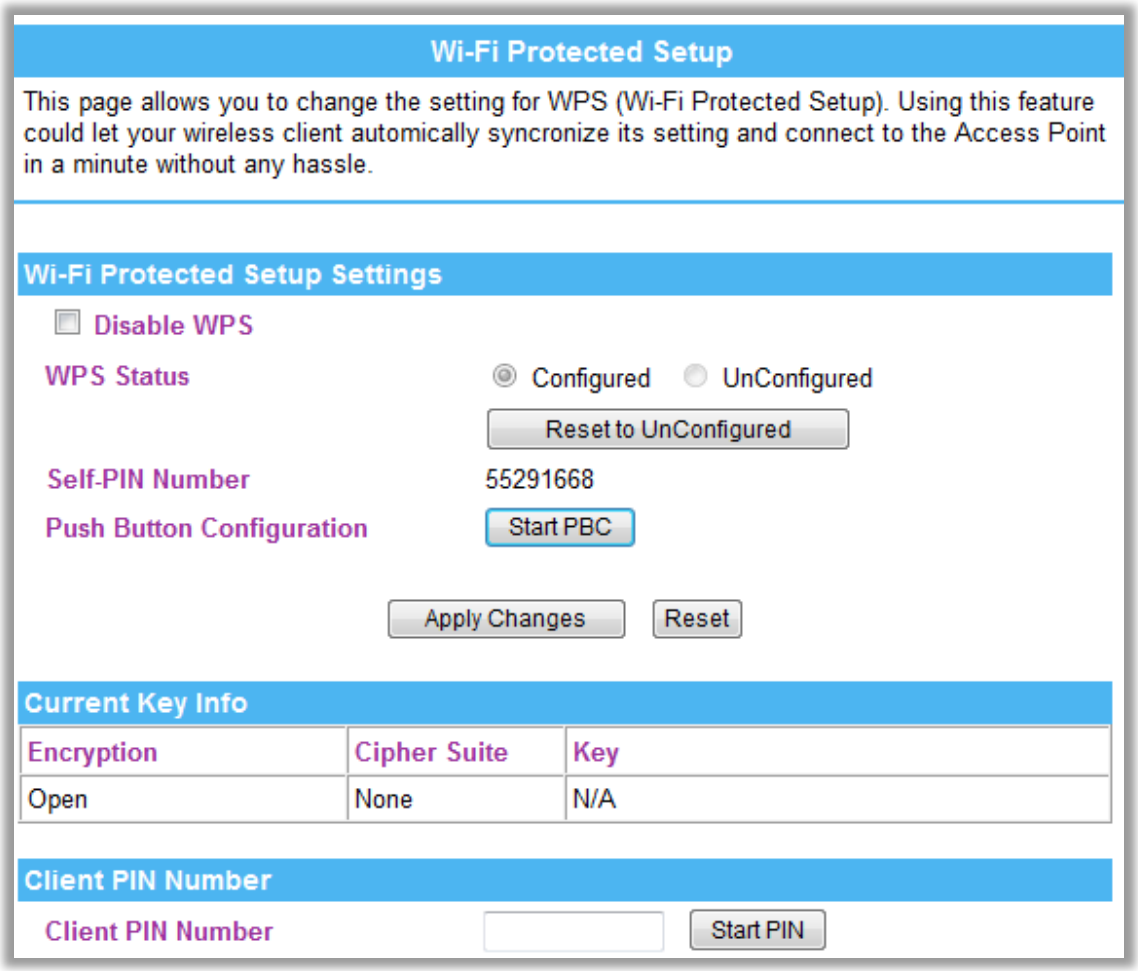
<table>
<tr><td></td><td>

This page allows you setup the wireless security for WDS. When enabled, you must make sure each WDS device has adopted the same encryption algorithm and Key.
WDS Security Setup
Encryption
None
WEP Key Format
ASCII (5 characters)
WEP Key
Pre-Shared Key Format
Passphrase
Pre-Shared Key
Apply Changes
Reset

Encryption: Pilih jenis encryption None, WEP 64 bits, WEP 128 bits, dan WPA2 (AES) dari menu pull-down.
WEP Key Format: Untuk jenis WEP 64 bits dan WEP 128 bits encryption, WEP Key Format adalah Hex atau ASCII.
WEP Key: Jika memilih Hex menggunakan angka hexadecimal (0-9, atau A-F). Pilih ASCII untuk menggunakan karakter ASCII (case-sensitive).
● Hexadecimal (WEP 64 bits): 10 Hex karakters (0~9, a~f).
● Hexadecimal (WEP 128 bits): 26 Hex karakters (0~9, a~f).
● ASCII (WEP 64 bits): 5 ASCII karakters (case-sensitive).
● ASCII (WEP 128 bits): 13 ASCII karakters (case-sensitive).
Pre-Shared Key Format: Pre-shared Key Format akan aktif bila menggunakan WPA (TKIP) dan WPA2 (AES) encryption ed. Ada 2 pilihan format untuk Pre-shared key, Passphrase dan Hex (64 karakters). Jika Hex di pilih , pengguna harus memasukkan 64 karakters string. Untuk kemudahan pengaturan, gunakan Passphrase (minimal 8 karakters) yang direkomendasi.
Pre-Shared Key: Pre-Shared Key berfungsi sebagai password. Pengguna harus memasukkan 8 sampai 63 karakter string jika Anda memilih passphrase. Pastikan password yang sama digunakan olh client untuk melakukan koneksi.</td></tr>
<tr><td>Show Statistics</td><td>Klik ini untuk melihat tabel WDS. Tabel ini menampilan alamat MAC, transmission packets dan errors, reception packets dan Tx Rate (Mbps) counters untuk setiap WDS AP yang terkoneksi.



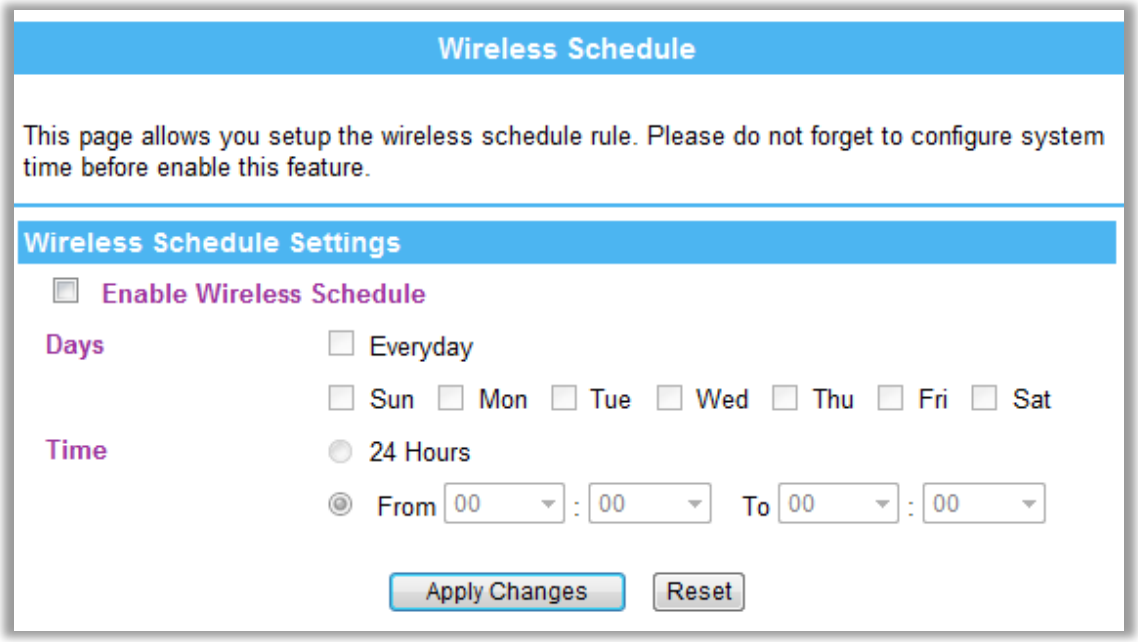
Refresh: Klik ini untuk me refresh informasi.
Close: Klik ini untuk menutup jendela.</td></tr>
<tr><td>Current WDS AP List</td><td>Here shows the current WDS AP information.</td></tr>
<tr><td>Delete Choosed</td><td>Klik Delete Choosed untuk menghapus item.</td></tr>
<tr><td>Delete All</td><td>Klik Delete All untuk menghapus semua items.</td></tr>
<tr><td>Reset</td><td>Klik Reset untuk kmbali ke nilai default.</td></tr>
</table>

WPS



Item / Fungsi	Penjelasan/ Instruksi
Disable WPS	Centang kotak untuk men non aktifkan fungsi WPS, pengaturan default adalah enabled.
WPS Status	Disini menampilkan status dari fungsi WPS. Klik **Reset to Unconfigured** untuk me rekonfigurasi koneksi WPS.
Self-PIN Number	Menampilkan 8 karakters PIN code dari router.
Push Button Configuration	Klik tombol **Start PBC** untuk membuat okneksi WPS dengan client.
Client PIN Number	Masukkan client PIN code kedalam kolom ini lalu Klik tombol **Start PIN** untuk membuat koneksi WPS dengan client.

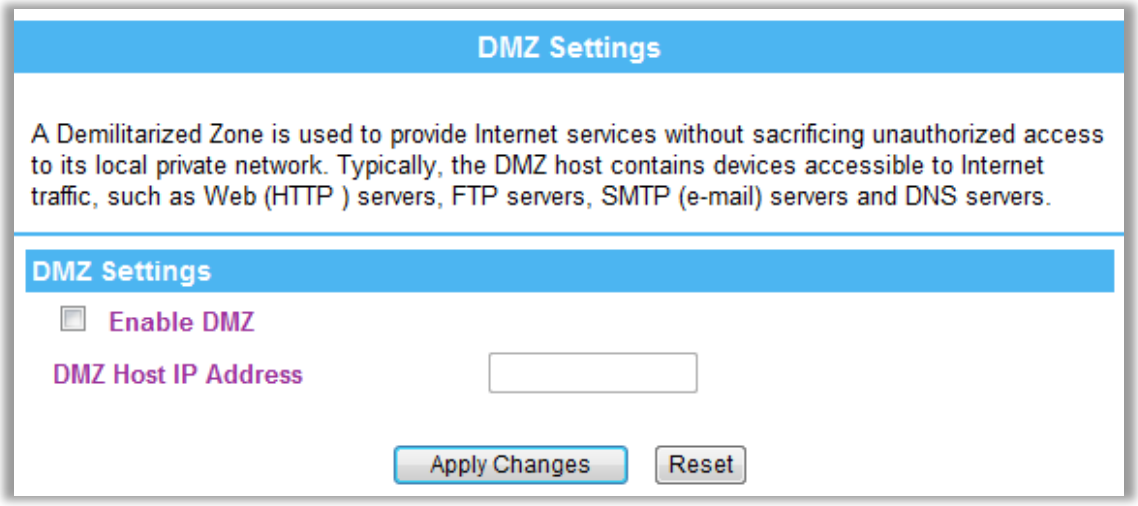
Schedule


Wireless Schedule
This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.
Wireless Schedule Settings
Enable Wireless Schedule
Days
Everyday
Sun Mon Tue Wed Thu Fri Sat
Time
24 Hours
From 00 : 00 To 00 : 00
Apply Changes
Reset

Item / Fungsi	Penjelasan/ Instruksi
Enable Wireless Schedule	Centang kotak untuk mengaktifkan fungsi schedule. Pilih hari dan waktu yang Anda ingin aktifkan.

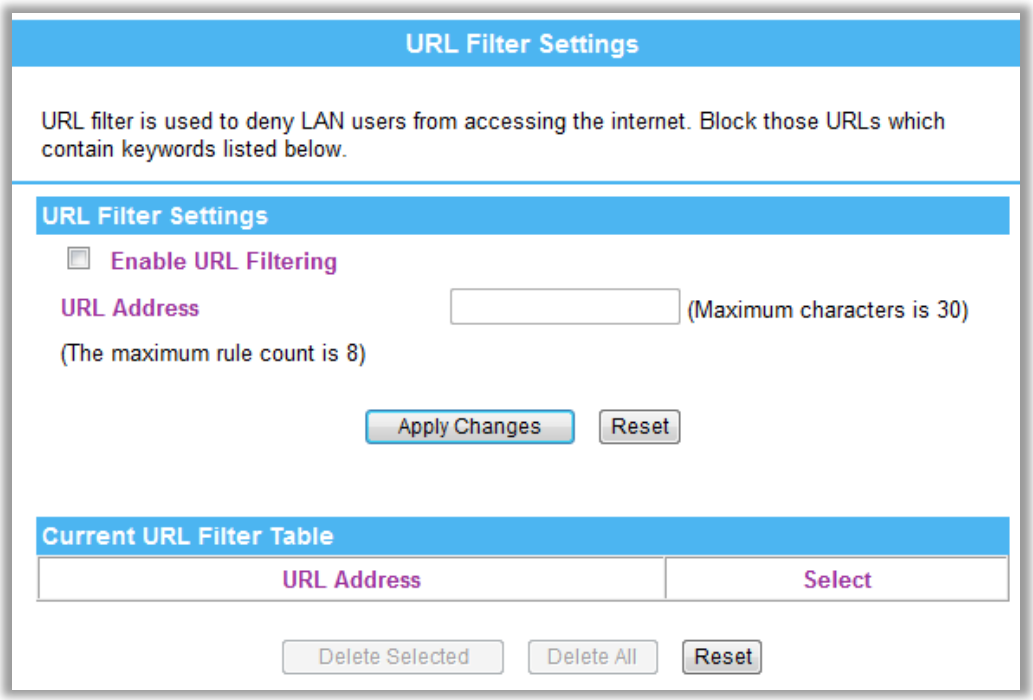
3.6. Firewall

DMZ Settings


DMZ Settings
A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.
DMZ Settings
Enable DMZ
DMZ Host IP Address
Apply Changes
Reset

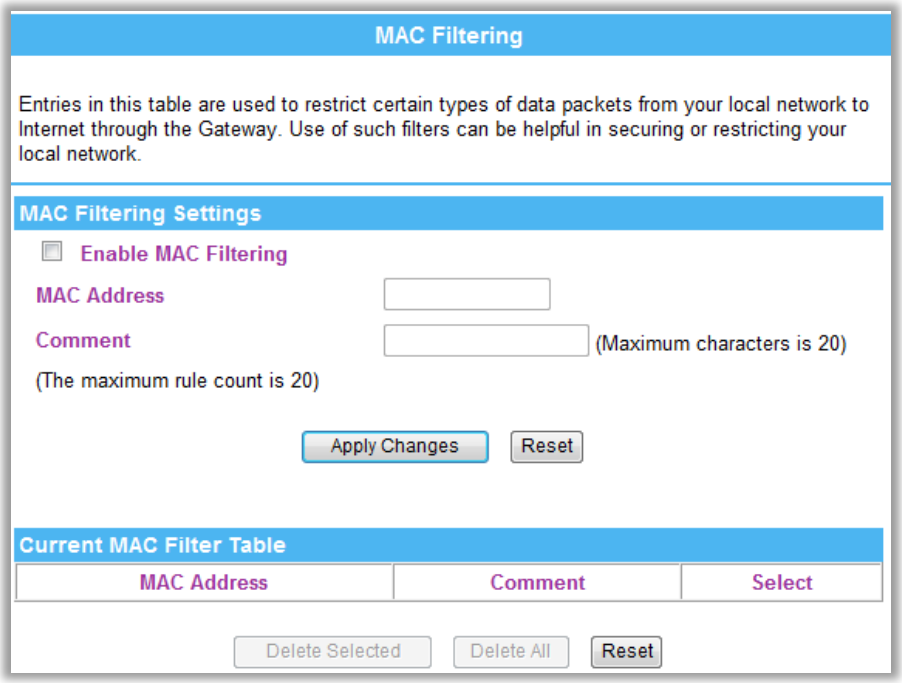
Item / Fungsi	Penjelasan/ Instruksi
Enable DMZ	Centang kotak untuk mengaktifkan fungsi DMZ. Jika fungsi DMZ Host aktif, berarti Anda bisa mengekspose computer di Internet untuk beberapa aplikasi seperti online game , dll.
DMZ Host IP Address	Masukkan alamat IP dari host Anda. **Catatan:** Anda harus menggunakan alamat IP statis pada PC clients Anda.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.

URL Filter Settings



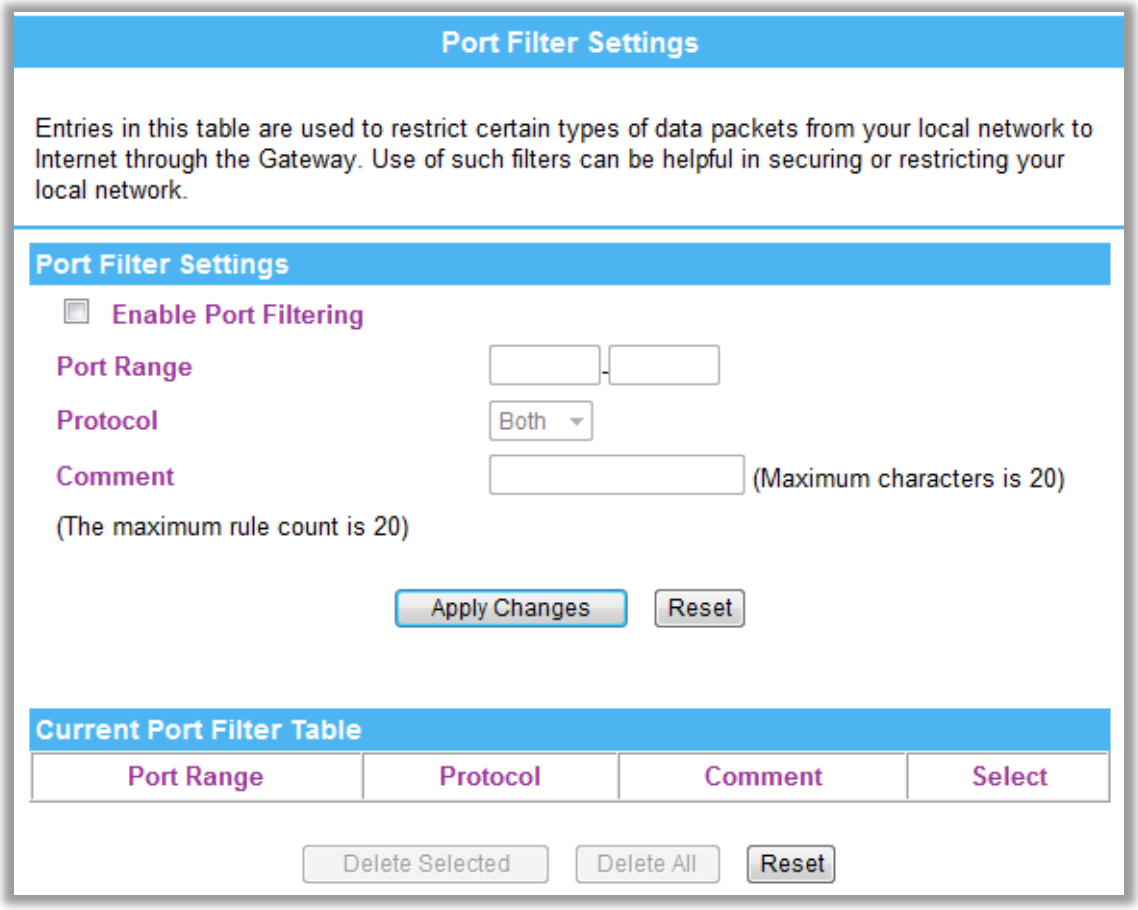
Item / Fungsi	Penjelasan/ Instruksi
Enable URL Filtering	Centang untuk mengaktifkan fungsi URL filtering.
URL Address	Masukkan **URL address**.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Current Filter Table	Menampilkan informasi dari alamat URL.
Delete Choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua items.
Reset	Klik **Reset** untuk kembali ke nilai default.

MAC Filtering


MAC Filtering
Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
MAC Filtering Settings
Enable MAC Filtering
MAC Address
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current MAC Filter Table
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

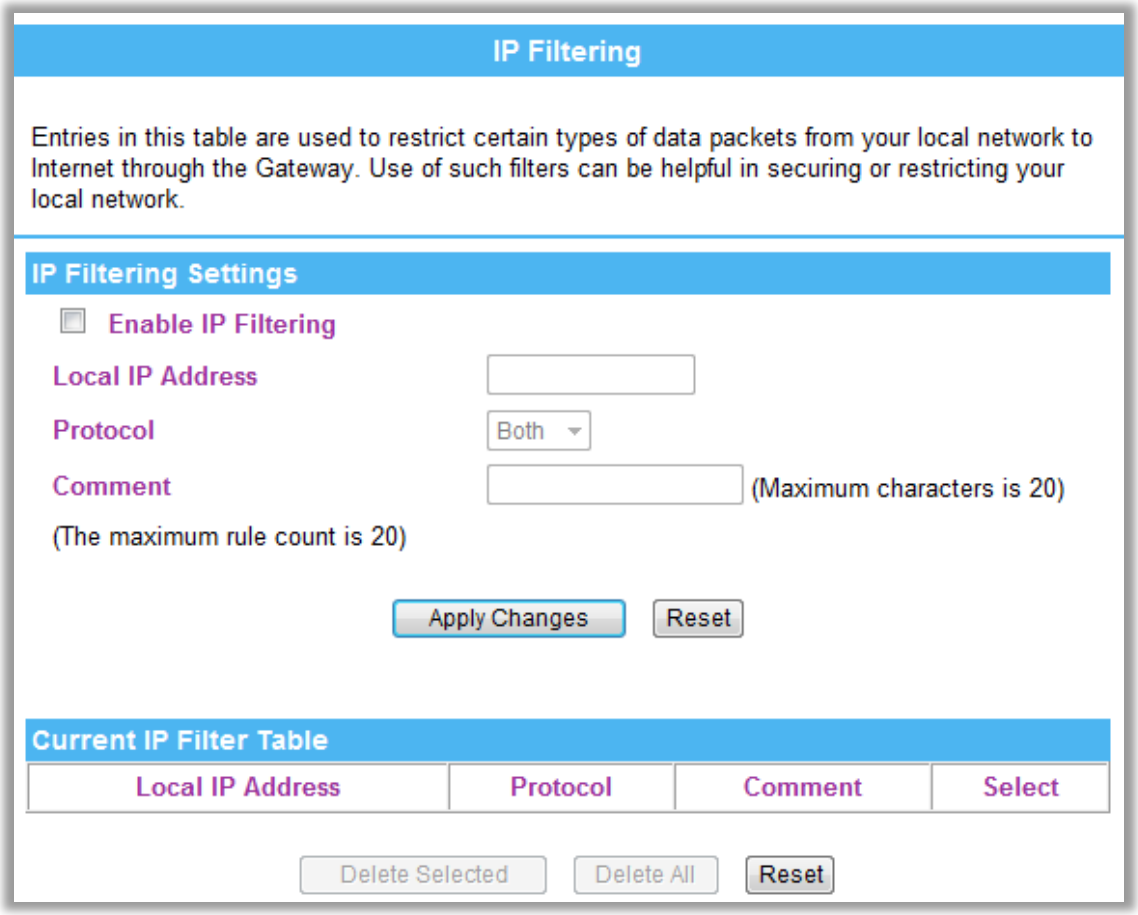
Item / Fungsi	Penjelasan/ Instruksi
Enable MAC Filtering	Centang untuk mengaktifkan fungsi MAC filtering.
MAC Address	Masukkan alamat MAC dari client.
Comment	Masukkan deskripsi dari alamat MAC.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Current Filter Table	Menampilkan informasi MAC filter.
Delete Choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua items.
Reset	Klik **Reset** untuk kembali ke nilai default.

Port Filtering Settings



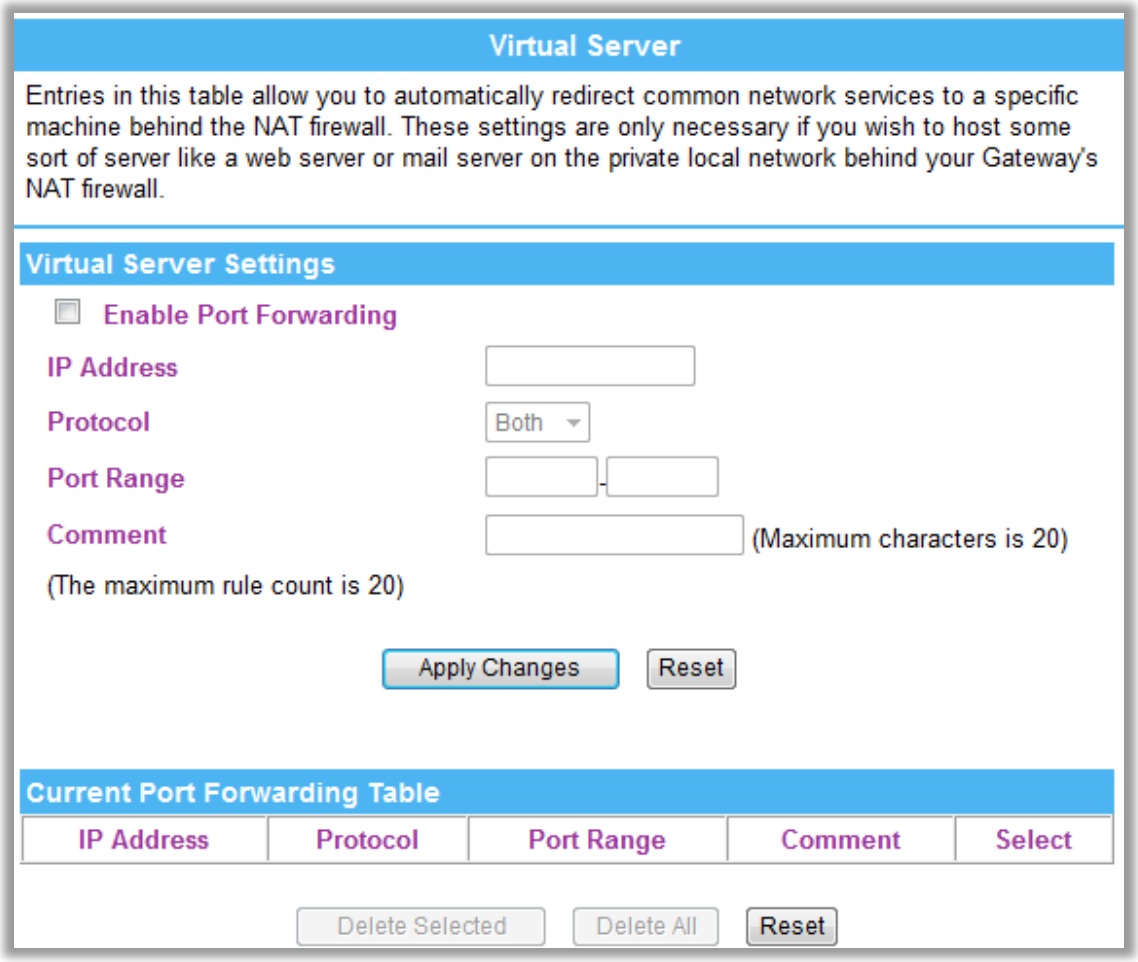
Item / Fungsi	Penjelasan/ Instruksi
Enable Port Filtering	Centang untuk mengaktifkan fungsi Port Filtering.
Port Range	Masukkan nomor awal dari range port. Jika layanan menggunakan nomor port tunggal, masukkan nomor yang sama pada kedua kolom.
Protocol	Pilih protocol (TCP, UDP atau Both) digunakan untuk layanan remote system.
Comment	Anda dapat membuat deskripsi untuk alamat MAC.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Current Port Forwarding Table	Menampilkan informasi dari Port Forwarding.
Delete Choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua items.
Reset	Klik **Reset** untuk kembali ke nilai default.

IP Filtering



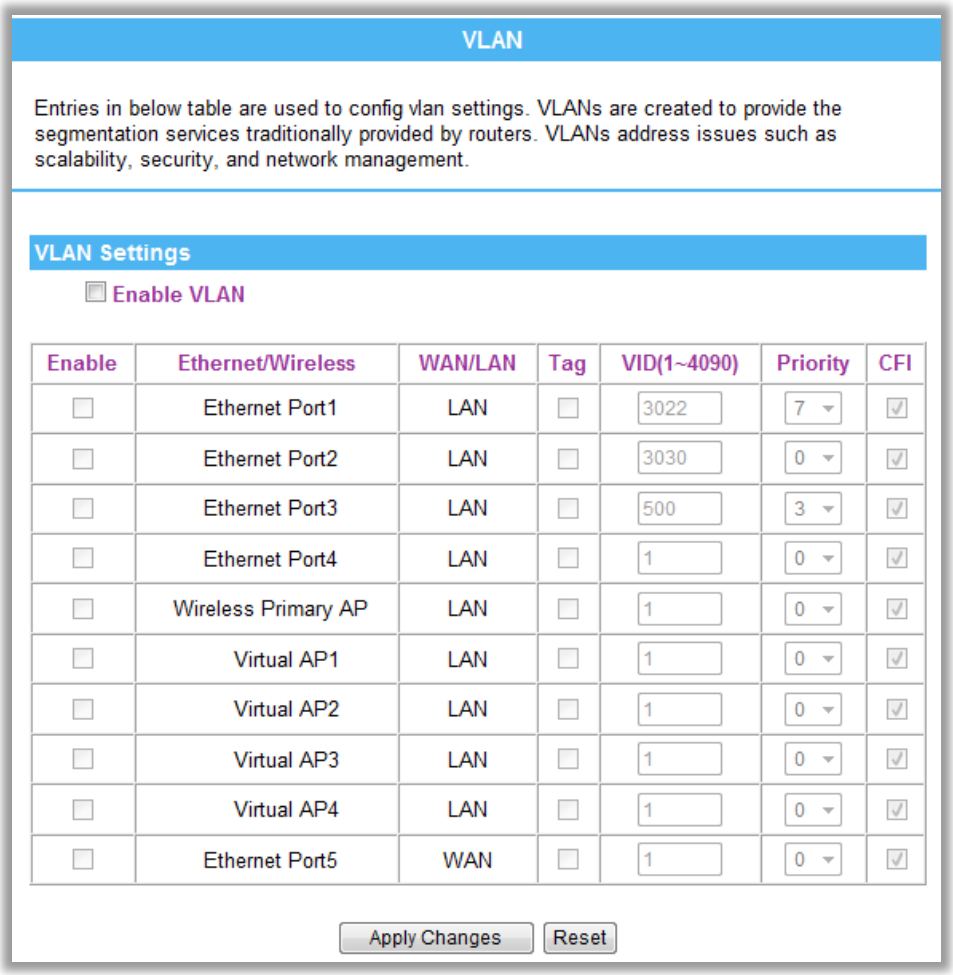
Item / Fungsi	Penjelasan/ Instruksi
Enable IP Filtering	Check to enable IP filtering function.
Local IP Address	Enter the local server's IP address.
Protocol	Pilih protocol (TCP, UDP atau Both) digunakan untuk layanan remote system.
Comment	Anda dapat membuat deskripsi untuk port range.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Current Filter Table	Menampilkan informasi dari IP filtering.
Delete Choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua items.
Reset	Klik **Reset** untuk kembali ke nilai default.

Virtual Server


Virtual Server
Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.
Virtual Server Settings
Enable Port Forwarding
IP Address
Protocol
Both
Port Range
Comment
(Maximum characters is 20)
(The maximum rule count is 20)
Apply Changes
Reset
Current Port Forwarding Table
IP Address
Protocol
Port Range
Comment
Select
Delete Selected
Delete All
Reset

Item / Fungsi	Penjelasan/ Instruksi
Enable Port Forwarding	Centang untuk mengaktifkan fungsi Port Forwarding.
IP Address	Masukkan alamat IP.
Protocol	Pilih the protocol (TCP, UDP atau Both) used to the remote system atau service.
Port Range	Untuk layanan TCP dan UDP, masukkan port awal yang digunakan. Jika layanan menggunakan nomor port tunggal, masukkan nomor yang sama pada kedua kolom.
Comment	Anda dapat membuat deskripsi untuk alamat MAC.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik **Reset** untuk kembali ke nilai semua.
Current Port Forwarding Table	Menampilkan informasi dari Port Forwarding.
Delete Choosed	Klik **Delete Choosed** untuk menghapus item.
Delete All	Klik **Delete All** untuk menghapus semua items.
Reset	Klik **Reset** untuk kembali ke nilai default.

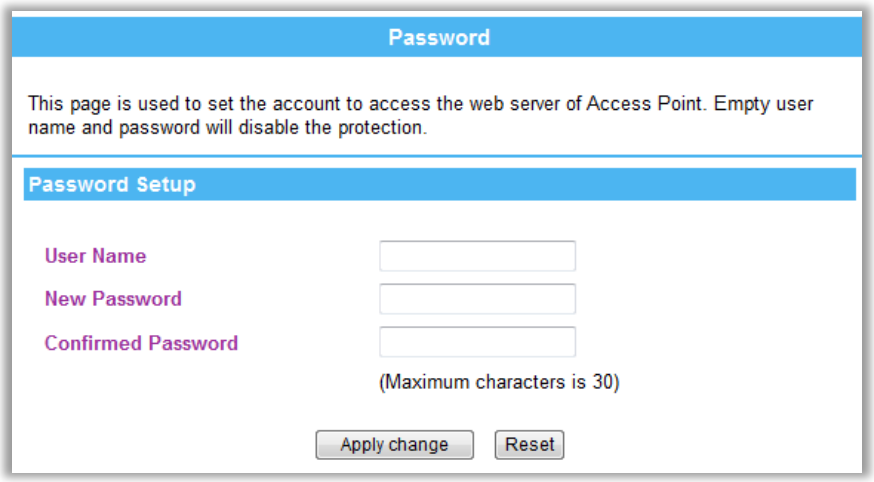
VLAN


VLAN
Entries in below table are used to config vlan settings. VLANs are created to provide the segmentation services traditionally provided by routers. VLANs address issues such as scalability, security, and network management.
VLAN Settings
Enable VLAN
Enable
Ethernet/Wireless
WAN/LAN
Tag
VID(1~4090)
Priority
CFI
Ethernet Port1 LAN 3022 7
Ethernet Port2 LAN 3030 0
Ethernet Port3 LAN 500 3
Ethernet Port4 LAN 1 0
Wireless Primary AP LAN 1 0
Virtual AP1 LAN 1 0
Virtual AP2 LAN 1 0
Virtual AP3 LAN 1 0
Virtual AP4 LAN 1 0
Ethernet Port5 WAN 1 0
Apply Changes
Reset

Item / Fungsi	Penjelasan/ Instruksi
Enable VLAN	Masukkan pada tabel di bawah ini digunakan untuk pengaturan konfigurasi VLAN. VLAN diciptakan untuk menyediakan layanan segmentasi tradisional yang disediakan oleh router. VLAN mengatasi masalah seperti skalabilitas, keamanan, dan manajemen network

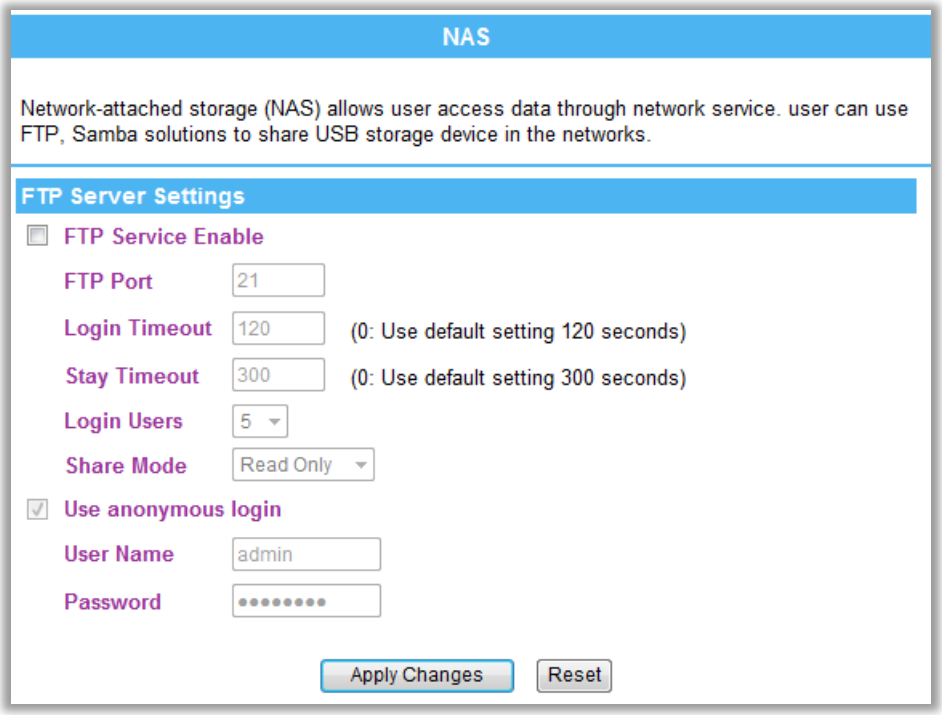
3.7. Administrasi

Password


Password
This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.
Password Setup
User Name
New Password
Confirmed Password
(Maximum characters is 30)
Apply change
Reset

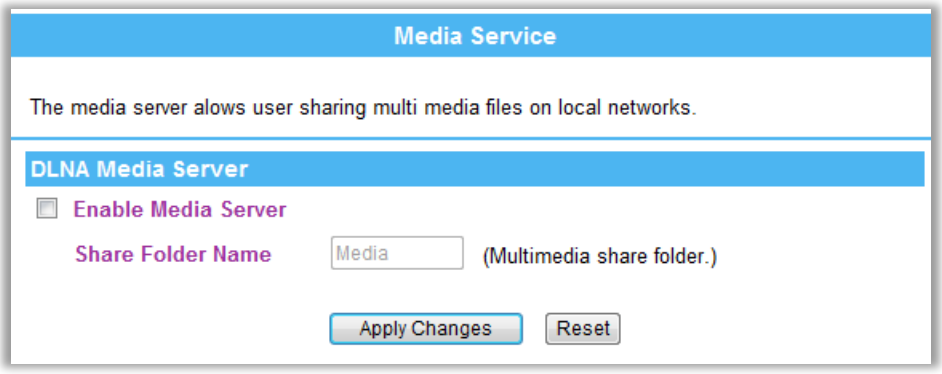
Item / Fungsi	Penjelasan/ Instruksi
User Name	Mengatur username login untuk melindungi konfigurasi Wireless Router mengakses melalui browser web. Nama pengguna password dan Kosong akan menonaktifkan perlindungan. Ini sangat dianjurkan untuk menetapkan satu set keamanan lebih lanjut.
New Password	Mengatur password login untuk melindungi konfigurasi Wireless Router mengakses melalui browser web. input maksimum adalah 30 karakters alfanumerik (case sensitive.)
Confirmed Password	Masukkan password kembali untuk konfirmasi.

NAS



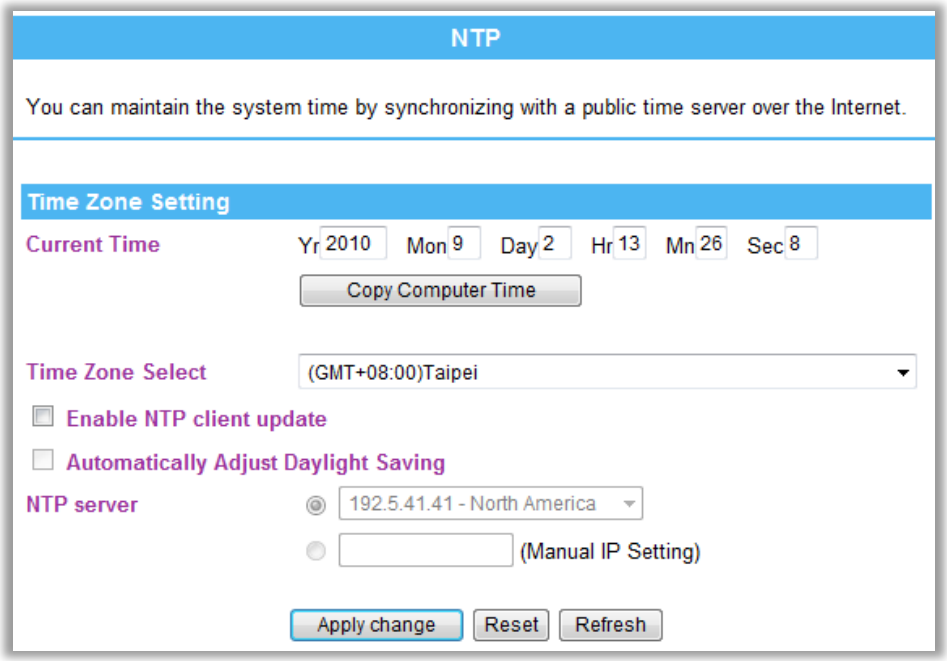
Item / Fungsi	Penjelasan/ Instruksi
FTP Service Enable	Network attached storage (NAS) memungkinkan data pengguna akses melalui layanan jaringan. Pengguna dapat menggunakan FTP, solusi Samba untuk berbagi perangkat penyimpanan USB dalam jaringan
FTP Port	Masukkan FTP port.
Login Timeout	Pengaturan waktu login.
Stay Timeout	Pengaturan waktu tinggal login.
Login Users	Pengaturan limit pengguna.
Share Mode	Untuk mengontrol otentikasi data untuk pengguna login.
Use anonymous login	Tidak perlu login dengan username atau password. Jika Anda tidak ingin menggunakan login anonim, harap masukkan nama pengguna dan sandi di lapangan

Media Share



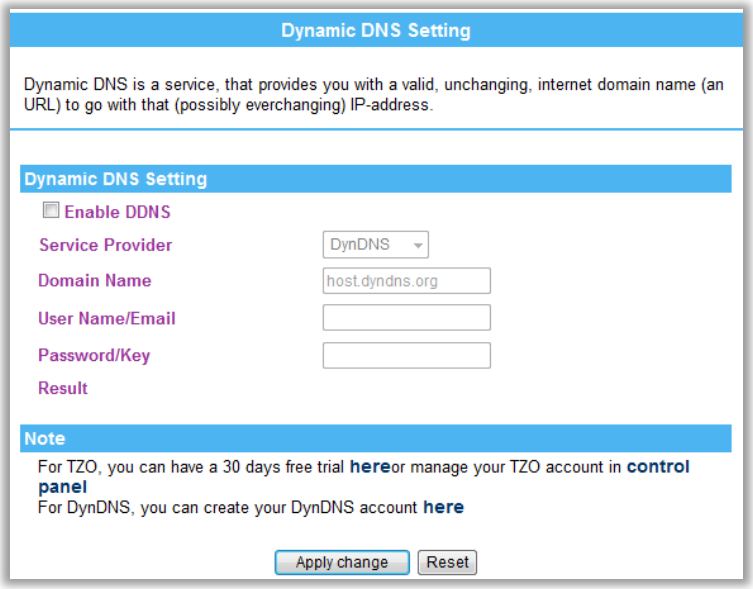
Item / Fungsi	Penjelasan/ Instruksi
Enable Media Server	Media Server memungkinkan pengguna berbagi file multi-media pada jaringan lokal
Share Folder Name	Masukkan nama file share pada LAN.

NTP



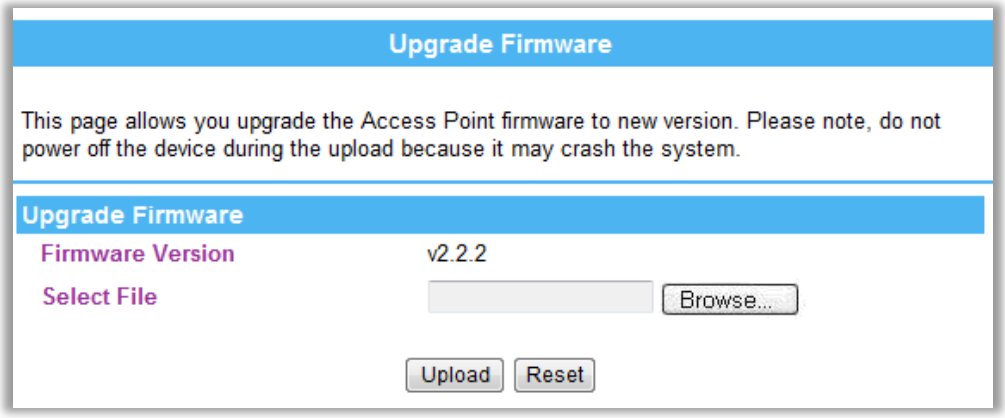
Item / Fungsi	Penjelasan/ Instruksi
Current Time	Masukkan jam pada wireless router atau Klik tombol **Copy Computer Time** untuk melakukan synchronize.
Time Zone Pilih	Pilih zona waktu local dari menu pull-down.
Enable NTP client update	Centang untuk mengaktifkan fungsi **NTP (**Network Time Protocol Server) **client update**.
Automatically Adjust Daylight Saving	Centang untuk mengaktifkan fungsi ini.
NTP server Manual IP setting	Anda dapat memilih NTP server dari menu pull-down atau memasukkan alamat IP secara manual.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Refresh	Klik tombol **Refresh** untuk merefresh waktu.

Dynamic DNS Setting


Dynamic DNS Setting
Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.
Dynamic DNS Setting
Enable DDNS
Service Provider
DynDNS
Domain Name
host.dyndns.org
User Name/Email
Password/Key
Result
Note
For TZO, you can have a 30 days free trial hereor manage your TZO account in control panel
For DynDNS, you can create your DynDNS account here
Apply change
Reset

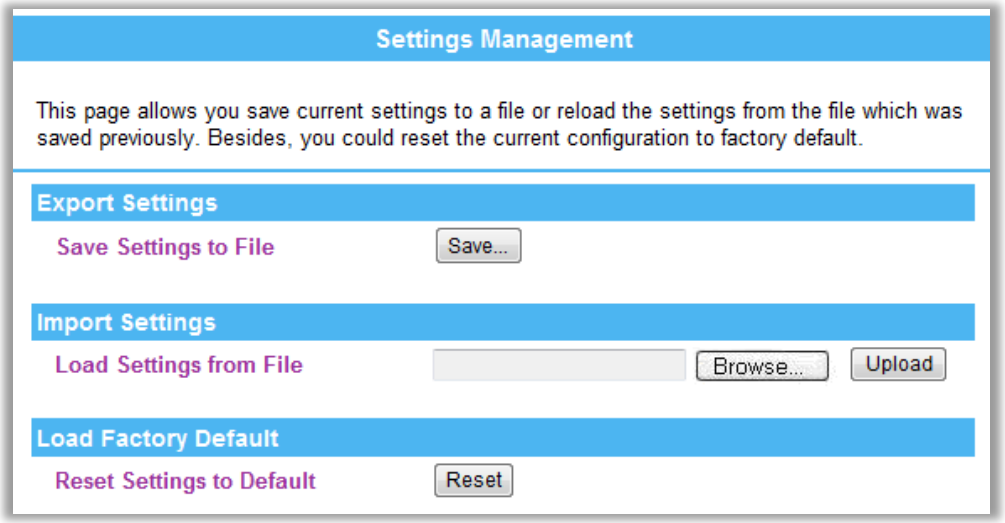
Item / Fungsi	Penjelasan/ Instruksi
Enable DDNS	Centang untuk mengkatifkan fungsi DDNS.
Service Provider	Pilih layanan DDNS yang Anda suka seperti DynDNS, TZO atau Oray dari menu pull-down.
Domain Name	Disini akan terlihat nama domain dari service provider.
User Name/Email	Masukkan alamat email yang Anda register di website service provider.
Password/Key	Masukkan passwords yang Anda register di website service provider. Max 30 alphanumeric karakters (case sensitive).
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Reset	Klik tombol **Refresh** untuk merefresh waktu.

Upgrade Firmware


Upgrade Firmware
This page allows you upgrade the Access Point firmware to new version. Please note, do not power off the device during the upload because it may crash the system.
Upgrade Firmware
Firmware Version
v2.2.2
Select File
Browse...
Upload
Reset

Item / Fungsi	Penjelasan/ Instruksi
Firmware Version	Disini menampilkan versi firmware terakhir.
Pilih File	Klik tombol Browse untuk mencari file firmware (browser akan menampilkan file path yang benar.)
Upload	Klik tombol Upload untuk memulai.
Reset	Klik tombol **Refresh** untuk merefresh waktu.

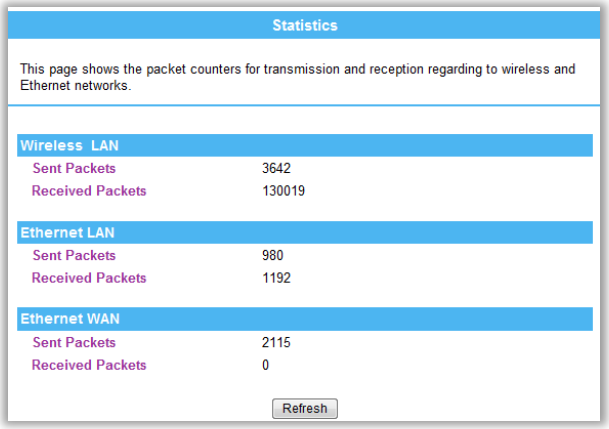
Settings Management


Settings Management
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Export Settings
Save Settings to File
Save...
Import Settings
Load Settings from File
Browse...
Upload
Load Factory Default
Reset Settings to Default
Reset

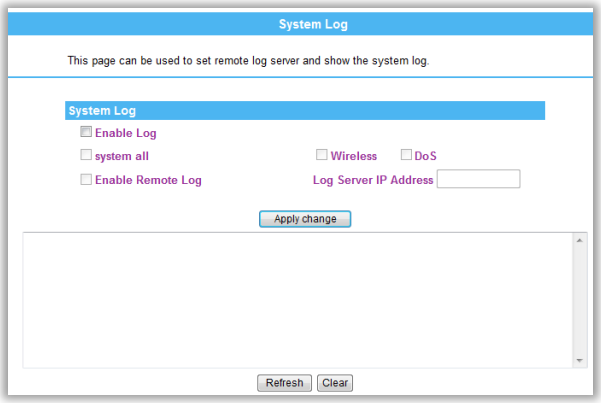
Item / Fungsi	Penjelasan/ Instruksi
Save Settings to File	Klik tombol **Save** untuk menyimpan hasil pengaturan ke dalam PC.
Load Settings form File	Klik tombol **Browse** untuk mencari dan membuka file konfigurasi. Lalu, Klik tombol **Upload** untuk memulai.
Reset Settings to Default	Klik tombol **Refresh** untuk merefresh waktu.

Statistics

Halaman ini menampilkan counter paket untuk penerimaan dan transmisi sehubungan dengan jaringan Ethernet dan nirkabel.



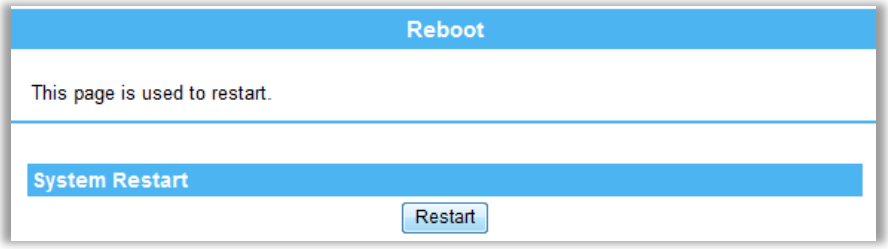
System Log



Item / Fungsi	Penjelasan/ Instruksi
Enable Log	Centang untuk mengaktifkan fungsi log.
System all	Mengaktifkan seluruh fungsi log.
Wireless	Hanya logs yang berhubungan dengan wireless LAN yang akan di catat.
DoS	Hanya logs yang berhubungan dengan DoS yang akan di catat.
Enable Remote Log	Hanya logs yang berhubungan dengan remote control yang akan di catat.
Log Server IP address	Hanya logs yang berhubungan dengan Server yang akan di catat.
Apply Changes	Setelah selesai melakukan pengaturan, Klik tombol **Apply changes** untuk menyimpan.
Refresh	Klik tombol **Refresh** untuk merefresh waktu.
Clear	Klik tombol **Clear** untuk menghapus log.

Reboot

Klik tombol **Reboot** untuk me restart Wireless Router.



BAGIAN 4: KONFIGURASI PC

4.1. Penjelasan

Untuk setiap PC, berikut yang harus Anda konfigurasi:

- Pengaturan TCP/IP network
- Konfigurasi Akses Internet
- Konfigurasi Wireless

4.2. Windows Clients

- Bagian ini menjelaskan bagaimana cara mengkonfigurasi Windows clients untuk Akses Internet melalui Wireless Router.
- Langkah pertama adalah memeriksa pengaturan TCP/IP pada PC.
- Wireless Router menggunakan protokol TCP / IP jaringan untuk semua fungsi, sehingga sangat penting bahwa protokol TCP / IP diinstal dan dikonfigurasi pada PC masing-masing.

TCP/IP Settings - Penjelasan

Jika menggunakan pengaturan default Wireless Router, dan standar pengaturan TCP / IP pada Windows, tidak ada perubahan perlu dibuat.

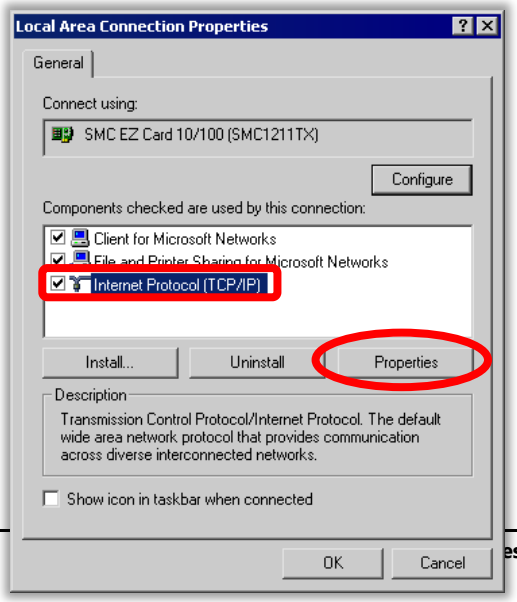
- Secara default, Wireless Router akan bertindak sebagai DHCP Server, secara otomatis memberikan alamat IP yang sesuai ke PC setiap PC boot.
- semua versi non-server Windows, standar TCP / IP setting untuk bertindak sebagai DHCP client.

Jika menggunakan alamat IP statis, berikut perubahan yang diperlukan:

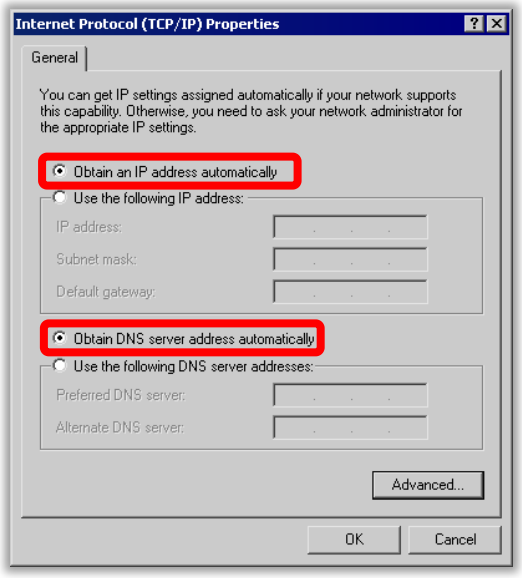
- *Gateway* harus di set ke alamat IP dari Wireless Router.
- *DNS* harus di set ke alamat yang disediakan oleh ISP (Internet Service Provider) Anda.

Checking TCP/IP Settings - Windows 2000

1. Pergi ke ***Start ▶ Control Panel ▶ Network dan Dial-up Connection***.
2. Klik kanan ikon ***Local Area Connection*** dan Pilih ***Properties***. Anda akan melihat gamabr berikut:
3. Pilih ***Internet Protocol (TCP/IP)*** untuk network card Anda.



4. Klik tombol ***Properties***. Anda akan melihat gambar berikut.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Pastikan pengaturan ***TCP/IP*** sudah benar.

Menggunakan DHCP

- Untuk menggunakan DHCP, Pilih ***Obtain an IP address automatically*** dan ***Obtain DNS server address automatically***. Ini merupakan pengaturan default Windows. Menggunakan cara ini direkomendasi. Secara default, Wireless Router akan bertindak sebagai DHCP Server.
- Restart PC Anda untuk memastikan alamat IP diperoleh dari Wireless Router secara otomatis.

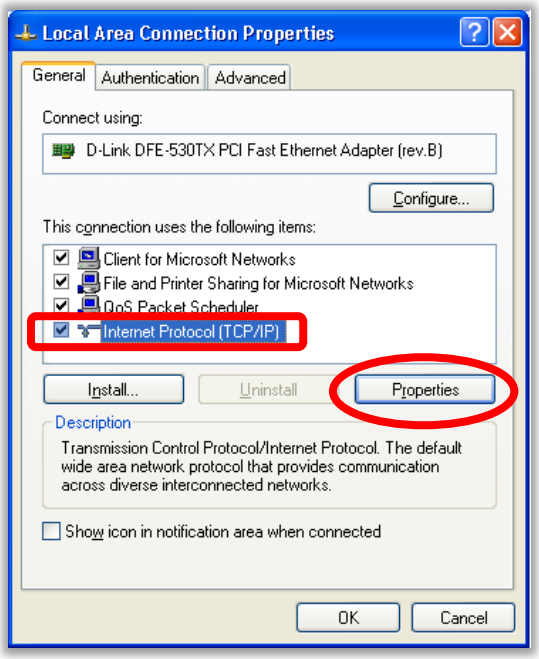
Menggunakan alamat IP Statis ("Use the following IP Address")

Jika PC Anda sudah terkonfigurasi, periksa dengan network administrator Anda sebelum melakukan beberapa perubahan berikut.

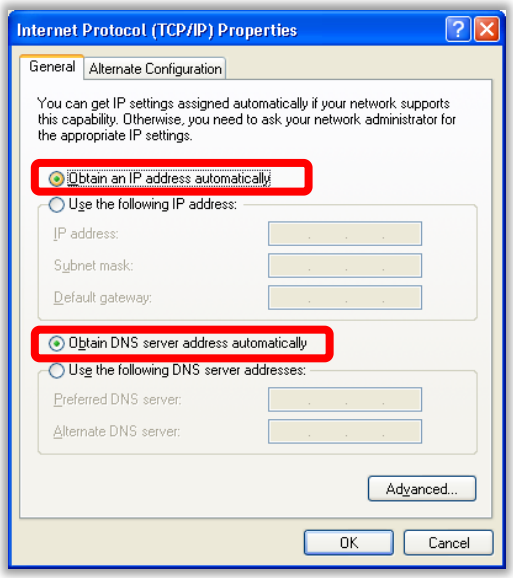
- Masukkan alamat IP dari Wireless Router pada kolom ***Default gateway***. (LAN administrator Anda akan menyarankan alamat IP yang mereka tetapkan menuju ke Wireless Router.)
- Jika kolom ***DNS Server*** *kosong*, Pilih ***Use the following DNS server addresses***, dan masukkan alamat DNS atau alamat yang di sediakan oleh ISP Anda.

Checking TCP/IP Settings - Windows XP

1. Pergi ke ***Start ▶ Control Panel ▶ Network Connection***.
2. Klik kanan ikon ***Local Area Connection*** dan pilih ***Properties***. Anda akan melihat gambar berikut:
3. Pilih ***Internet Protocol (TCP/IP)*** untuk network card Anda.



4. Klik tombol ***Properties***. Anda akan melihat gambar berikut.


Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Pastikan pengaturan ***TCP/IP*** sudah benar.

Menggunakan DHCP

- Untuk menggunakan DHCP, Pilih ***Obtain an IP address automatically*** dan ***Obtain DNS server address automatically***. Ini merupakan pengaturan default Windows. Menggunakan cara ini direkomendasi. Secara default, Wireless Router akan bertindak sebagai DHCP Server.
- Restart PC Anda untuk memastikan alamat IP diperoleh dari Wireless Router secara otomatis.

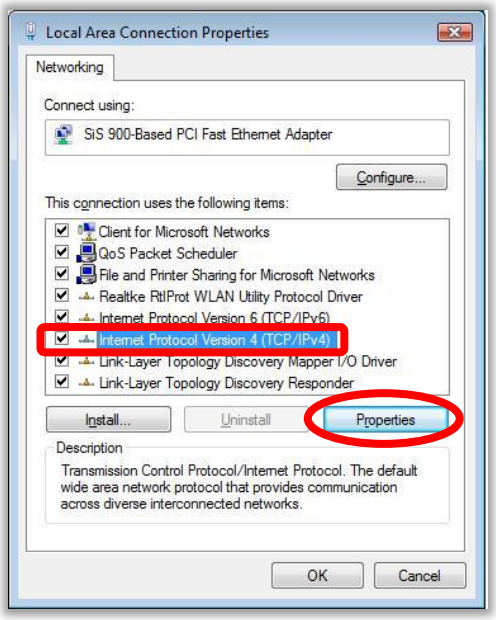
Menggunakan alamat IP Statis ("Use the following IP Address")

Jika PC Anda sudah terkonfigurasi, periksa dengan network administrator Anda sebelum melakukan beberapa perubahan berikut.

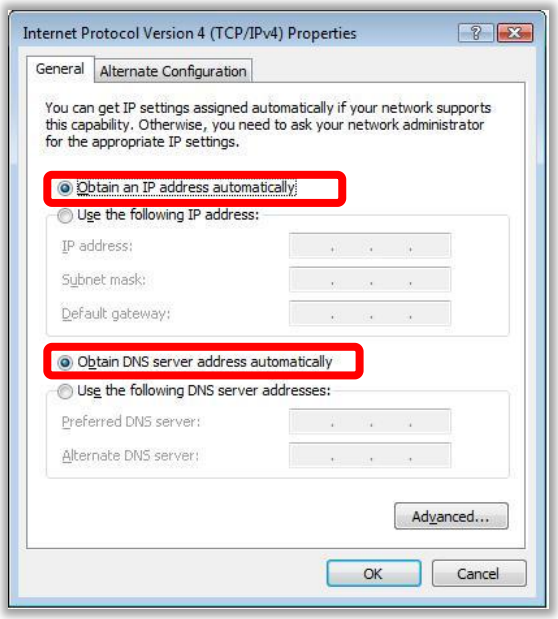
- Masukkan alamat IP dari Wireless Router pada kolom ***Default gateway***. (LAN administrator Anda akan menyarankan alamat IP yang mereka tetapkan menuju ke Wireless Router.)
- Jika kolom ***DNS Server*** *kosong*, Pilih ***Use the following DNS server addresses***, dan masukkan alamat DNS atau alamat yang di sediakan oleh ISP Anda.

Checking TCP/IP Settings - Windows Vista

1. Pergi ke ***Start ▶ Control Panel ▶ Network dan Internet ▶ Network dan Sharing Center ▶ Manage Network Connections ▶ Local Area Connection***.
2. Klik kanan ikon ***Local Area Connection*** dan pilih ***Properties***. Anda akan melihat gambar berikut:
3. Pilih ***Internet Protocol Version 4 (TCP/IPv4)*** atau ***6 (TCP/IPv6)*** untuk network card Anda.


Local Area Connection Properties
Networking
Connect using:
SiS 900-Based PCI Fast Ethernet Adapter
Configure...
This connection uses the following items:
Client for Microsoft Networks
QoS Packet Scheduler
File and Printer Sharing for Microsoft Networks
Realtke RtlProt WLAN Utility Protocol Driver
Internet Protocol Version 6 (TCP/IPv6)
Internet Protocol Version 4 (TCP/IPv4)
Link-Layer Topology Discovery Mapper I/O Driver
Link-Layer Topology Discovery Responder
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK
Cancel

4. Klik tombol ***Properties***. Anda akan melihat gambar berikut.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Pastikan pengaturan ***TCP/IP*** sudah benar.

Menggunakan DHCP

- Untuk menggunakan DHCP, Pilih ***Obtain an IP address automatically*** dan ***Obtain DNS server address automatically***. Ini merupakan pengaturan default Windows. Menggunakan cara ini direkomendasi. Secara default, Wireless Router akan bertindak sebagai DHCP Server.
- Restart PC Anda untuk memastikan alamat IP diperoleh dari Wireless Router secara otomatis.

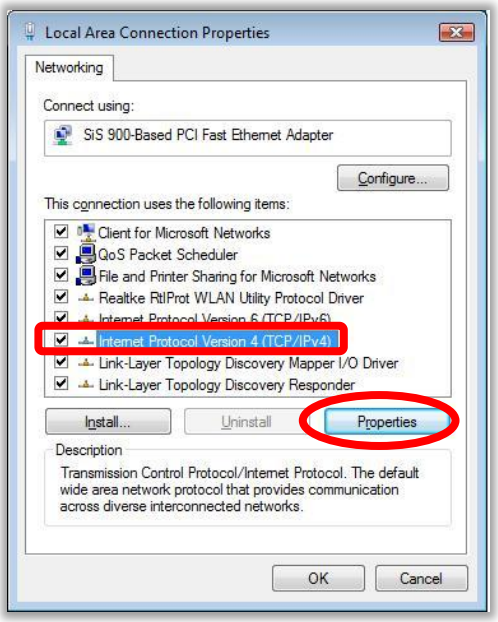
Menggunakan alamat IP Statis ("Use the following IP Address")

Jika PC Anda sudah terkonfigurasi, periksa dengan network administrator Anda sebelum melakukan beberapa perubahan berikut.

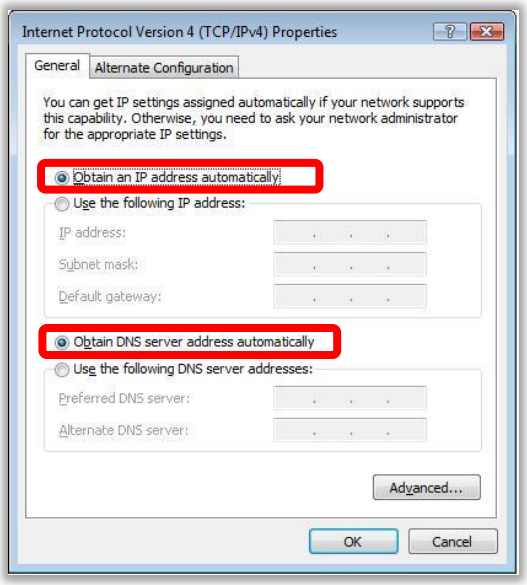
- Masukkan alamat IP dari Wireless Router pada kolom ***Default gateway***. (LAN administrator Anda akan menyarankan alamat IP yang mereka tetapkan menuju ke Wireless Router.)
- Jika kolom ***DNS Server*** *kosong*, Pilih ***Use the following DNS server addresses***, dan masukkan alamat DNS atau alamat yang di sediakan oleh ISP Anda.

Checking TCP/IP Settings - Windows 7

1. Pergi ke ***Start ▶ Control Panel ▶ Network dan Sharing Center ▶ Manage Network Connections ▶ Local Area Connection***.
2. Klik kanan ikon ***Local Area Connection*** dan pilih ***Properties***. Anda akan melihat gmbar berikut:
3. Pilih ***Internet Protocol Version 4 (TCP/IPv4)*** atau ***6 (TCP/IPv6)*** network card Anda.



4. Klik tombol ***Properties***. Anda akan melihat gambar berikut.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

5. Pastikan pengaturan ***TCP/IP*** sudah benar.

Menggunakan DHCP

- Untuk menggunakan DHCP, Pilih ***Obtain an IP address automatically*** dan ***Obtain DNS server address automatically***. Ini merupakan pengaturan default Windows. Menggunakan cara ini direkomendasi. Secara default, Wireless Router akan bertindak sebagai DHCP Server.
- Restart PC Anda untuk memastikan alamat IP diperoleh dari Wireless Router secara otomatis.

Menggunakan alamat IP Statis ("Use the following IP Address")

Jika PC Anda sudah terkonfigurasi, periksa dengan network administrator Anda sebelum melakukan beberapa perubahan berikut.

- Masukkan alamat IP dari Wireless Router pada kolom ***Default gateway***. (LAN administrator Anda akan menyarankan alamat IP yang mereka tetapkan menuju ke Wireless Router.)
- Jika kolom ***DNS Server*** *kosong*, Pilih ***Use the following DNS server addresses***, dan masukkan alamat DNS atau alamat yang di sediakan oleh ISP Anda.

Akses Internet

Untuk mengkonfigurasi PC Anda menggunakan Wireless Router untuk Akses Internet:

- Pastikan DSL modem, Cable modem, atau koneksi internet lainnya berfungsi.
- Gunakan prosedur berikut untuk mengkonfigurasi Browser Anda untuk mengakses Internet via LAN, daripada menggunakan koneksi Dial-up.

Untuk Windows 2000

1. Pilih ***Start menu ▶ Settings ▶ Control Panel ▶ Internet Options***.
2. Pilih tab ***Connection***, dan Klik tombol ***Setup***.
3. Pilih "***I want to set up my Internet connection manually,*** atau ***I want to connect through a local area network (LAN)***" dan Klik ***Next***.
4. Pilih ***"I connect through a local area network (LAN)***" dan Klik ***Next***.
5. Pastikan semua kotak pada layar ***Local area network Internet Configuration*** *tidak di centang*.
6. Pilih opsi "No" ketika muncul "Do you want to set up an Internet mail account now?"
7. Klik ***Finish*** untuk menutup jendela. Saat ini ***Connection Wizard Setup*** telah selesai.

Untuk Windows XP

1. Pilih ***Start menu ▶ Control Panel ▶ Network dan Internet Connections***.
2. Pilih Set up atau ubah Internet Connection Anda.
3. Pilih tab Connection, dan Klik tombol Setup.
4. Batalkan layar pop-up "Location Information".
5. Klik **Next** on the "New Connection Wizard" screen.
6. Pilih "**Connect to the Internet**" dan Klik **Next**.
7. Pilih "**Set up my connection manually**" dan Klik **Next**.
8. Centang "**Connect using a Broadband connection that is always on**" dan Klik **Next**.
9. Klik ***Finish*** untuk menutup. Saat ini ***New Connection Wizard Setup*** telah selesai.

Untuk Windows Vista

1. Pilih ***Start menu ▶ Control Panel ▶ Network dan Internet ▶ Network dan Sharing Center***.
2. Pilih ***Set up a connection atau network***.
3. Pilih ***Connect to the Internet*** dan Klik ***Next*** untuk melanjutkan.
4. Pilih ***Broadband (PPPoE)***.
5. Masukkan ***User name*** dan ***Password*** yang disediakan oleh ISP, lalu Klik ***Connect*** untuk membuat koneksi.

Untuk Windows 7

1. Pilih ***Start menu ▶ Control Panel ▶ Network Sharing Center***.
2. Pilih ***Set up a new connection atau network***.
3. Pilih ***Connect to the Internet*** dan Klik ***Next*** untuk melanjutkan.
4. Pilih ***Broadband (PPPoE)***.
5. Masukkan ***User name*** dan ***Password*** yang disediakan oleh ISP, lalu Klik ***Connect*** untuk membuat koneksi.

Mengakses AOL

Untuk mengakses AOL (America On Line) melalui Wireless Router, *AOL untuk Windows* software harus di konfigurasi menggunakan TCP/IP network access, daripada mengunakan koneksi dial-up. Proses konfigurasi berikut ini:

1. Jalankan AOL pada Windows communication software. Pastikan Versinya 2.5, 3.0 atau terbaru. prosedur ini tidak bekerja untuk versi sebelumnya.
2. Klik tombol **Setup**.
3. Pilih buat lokasi, dan ubah nama lokasi dari "New Locality" menjadi " Wireless Router ".
4. Klik **Edit Location**. Pilih TCP/IP untuk kolom Network. (Biarkan nomor telepon kosong).
5. Klik Save, lalu OK.
6. Konfigurasi saat ini sudah selesai.
7. Sebelum meng klik "Sign On", selalu pastikan Anda menggunakan lokasi " Wireless Router ".

4.3. Macintosh Clients

Dari Macintosh Anda, Anda dapat mengakses Internet melalui Wireless Router. Prosedur nya berikut ini.

1. Buka TCP/IP Control Panel.
2. Pilih Ethernet dari Connect melalui menu pop-up.
3. Pilih menggunakan DHCP Server dari Configure menu pop-up. Kolom DHCP Client ID tidak boleh kosong.
4. Tutup TCP/IP panel, simpan hasil pengaturan Anda.

Jika menggunakan alamat IP statis selain DHCP, perubahan yang dibutuhkan sebagai berikut:

- Set kolom *Router Address* ke r.alamat IP Wireless Router.
- Pastikan pengaturan DNS Anda benar.

4.4. Linux Clients

Untuk mengakses Internet melalui Wireless Router, hanya perlu untuk mengatur Wireless Router sebagai "Gateway". Pastikan anda login sebagai "root" sebelum mencoba perubahan.

Alamat IP Statis

Secara default, kebanyakan instalasi Unix menggunakan alamat IP statis. Jika Anda ingin terus menggunakan alamat IP statis, buatlah perubahan konfiguasi berikut.

- Set "Default Gateway" Anda ke alamat IP dari Wireless Router.
- Pastikan pengaturan DNS Anda benar.

Untuk bertindak sebagai DHCP Client (Direkomendasi)

Prosedur di bawah ini dapat bervariasi tergantung versi Linux dan X-windows Anda gunakan.

1. Jalankan X Windows client Anda.
2. Pilih *Control Panel – Network*.
3. Pilih "*Interface*" untuk Network card Anda. Biasanya, ini dikenal dengan "eth0".
4. Klik tombol *Edit*, set "protocol" ke "DHCP", dan simpan pengaturan ini.
5. Untuk menerapkan perubahan yang Anda buat:
   Gunakan tombol "Deactivate" dan "Activate" buttons, jika tersedia.
   Atau, restart PC Anda.

4.5. Unix Systems Lainnya

Untuk mengakses Internet melalui Wireless Router:

- Pastikan kolom "Gateway" untuk network card Anda di set ke alamat IP dari Wireless Router.
- Pastikan pengaturan DNS Anda benar.

4.6. Konfigurasi Wireless Station

- Bagian ini berlaku untuk semua stasiun nirkabel yang ingin menggunakan Wireless Router sebagai jalur akses, terlepas dari sistem operasi yang digunakan pada klien.
- Untuk menggunakan Wireless Router, setiap wireless station harus memiliki pengaturan yang kompatibel sebagai berikut:

Mode	Mode harus di set ke *Infrastructure*.
SSID (ESSID) (Extended Service Set Identifier)	Nama network harus sama dengan Wireless Router. ***Catatan! SSID*** (service set identifier) *adalah* ***case- sensitive.***
Disable	Jika tidak ada security yang diaktifkan pada Wireless Router, security setiap stasiun harus dinonaktifkan juga. Dan, Anda dapat menghubungkan Wireless Router tanpa security, tetapi TIDAK dianjurkan
WEP **Open System/ Shared Key/ Auto**	Secara default, WEP pada Wireless Router tidak aktif. Shared Key hanya mendukung WEP sebagai encryption. AUTO (Open/Shared) artinya AP dapat menerima koneksi STA dengan OPEN-WEP atau SHARED-WEP. ● Jika WEP tidak aktif pada Wireless Router, semua stations harus men nonaktifkan fungsi WEP juga. ● Jika WEP aktif pada Wireless Router, setiap station harus menggunakan pengaturan yang sama dengan Wireless Router.
Personal (Pre-Shared Key) **WPA** **WPA2** **WPA2-Mixed**	WPA-PSK (TKIP/AES)/ WPA2-PSK (TKIP/AES): Jika satu dari security ini diaktifkan pada Wireless Router. Setiap STA harus menggunakan algorithms dan passphrase yang sama dengan Wireless Router. **Pre-Shared Key Format:** Memiliki pilihan untuk set Pre-shared key, **Passphrase** dan **Hex (64 karakters)**. Jika **Hex** yang dipilih, pengguna harus memasukkan 64 karakter. Untuk pengaturan yang lebih mudah, **Passphrase** (minimum 8 karakter) yang direkomendasi. **Pre-Shared Key :** Pre-Shared Key berfungsi sebagai password. Pengguna harus memasukkan 8 sampai 63 karakter string jika Anda memilih passphrase. Pastikan password yang sama digunakan olh client untuk melakukan koneksi.

Enterprise (RADIUS) **WPA** **WPA2** **WPA2-Mixed** **802.1x**	**RADIUS Server**: RADIUS adalah otentikasi, authorization dan akuntansi client-server protokol. Client adalah Network Access Server yang keinginan untuk otentikasi link nya. The RADIUS adalah server yang memiliki akses ke database user dengan informasi otentikasi. Setiap stasiun harus mengatur Server RADIUS alamat IP, password dan port yang disediakan oleh ISP anda.

Secara default, Wireless Router akan memungkinkan koneksi 802.11b, 802.11g dan 802.11n.

BAGIAN 5: PERMASALAHAN

5.1. Penjelasan

Pada BAGIAN ini mencakup beberapa masalah umum yang mungkin dihadapi ketika menggunakan Wireless Router dan beberapa solusi yang mungkin untuk mereka. Jika Anda mengikuti langkah-langkah yang disarankan dan Wireless Router masih tidak berfungsi dengan benar, hubungi dealer Anda untuk saran lebih lanjut.

5.2. Masalah Umum

Masalah 1:	Tidak bisa terhubung ke Wireless Router untuk mengkonfigurasi.
Solusi 1:	Periksa berikut ini: • Periksa apakah Wireless Router sudah terinstall dengan benar, LAN OK, dan powered HIDUP. • Pastikan PC dan Wireless Router Anda berada pada network segment yang sama. • Jika PC Anda di set ke "Obtain an IP address automatically" (DHCP client), silahkan lakukan restart. • Jika PC Anda menggunakan alamat IP statis, pastikan bahwa menggunakan alamat IP dalam rentang 192.168.123.1 sampai 192.168.123.253 sehingga sesuai dengan alamat default IP Wireless Router 192.168.123.254. Juga, Network Mask harus di set ke 255.255.255.0 untuk menyesuaikan Wireless Router. Pada Windows, Anda dapat memeriksa pengaturan ini dengan menggunakan Control Panel-Network untuk protokol TCP / IP. Anda dapat memeriksa BAGIAN 4: KONFIGURASI PC-pengaturan TCP / IP untuk referensi.

5.3. Akses Internet

Masalah 1:	Ketika saya memasukkan alamat IP atau URL, saya mendapatkan time out error.
Solusi 1:	Ada beberapa hal yang dapat menyebabkan hal ini. Coba ikuti beberapa langkah berikut. • Periksa apakah PC lain bekerja. Jika ya, pastikan bahwa pengaturan IP pada PC Anda sudah benar. Jika menggunakan alamat IP statis, periksa Network Mask, Default DNS dan gateway. • Jika PC sudah dikonfigurasi dengan benar, tapi masih tidak berfungsi, periksa Wireless Router. Pastikan bahwa itu terhubung dan HIDUP. • Jika Wireless Router sudah tekonfigurasi dengan benar, periksa koneksi Internet Anda (ADSL/Cable modem) untuk melihat apakah bekerja dengan benar.

Masalah 2:	Beberapa aplikasi tidak dapat berjalan dengan semestinya ketika menggunakan Wireless Router.
Solusi 2:	Proses data yang dilalui melalui Wireless Router tidak transparant. Gunakan fitur *Filter Settings* untuk memungkinkan menggunakan aplikasi Internet, yang tidak berfungsi semestinya. Jika tidak juga menyelesaikan masalah, Anda dapat menggunakan fungsi *DMZ*. Ini bisa bekerja untuk hampir semua aplikasi, namun: • Memiliki resiko keamanan, karena fungsi firewall tidak aktif. • Hanya satu PC yang dapat menggunakan fitur ini.

5.4. Wireless Access

Masalah 1:	PC saya tidak dapat menemukan Wireless Router.
Solusi 1:	Periksa berikut ini: • **Mode:** PC Anda di set ke mode *Infrastructure*. (Access Points selalu bekerja dengan mode *Infrastructure*) • **SSID:** SSID (service set identifier) pada PC Anda dan Wireless Router tidak sama. Ingat bahwa SSID itu case-sensitive. Jadi, contoh "**W**orkgroup" tidak sama dengan "**work**group." • **Security:** kedua PC dan the Wireless Router Anda harus menggunakan pengaturan yang sama untuk security. o **Disabled:** Pengaturan standar untuk security Wireless Router dinonaktifkan, sehingga stasiun nirkabel Anda juga harus dinonaktifkan security nya. o **Enabled:** Jika security aktif pada Wireless Router, PC Anda harus mengaktifkan security nya juga dan key harus sama. o Sangat diarankan untuk membuat keamanan yang bisa mencegah unauthorized mengakses ke jaringan nirkabel Anda. Setting keamanan WPA2 dianjurkan yang menawarkan keamanan yang lebih kuat daripada WEP. Kedua komputer Anda dan Wireless Router harus memiliki pengaturan yang sama untuk keamanan. • **Channel:** Jaringan area lokal nirkabel diaktifkan dan dikonfigurasi secara default. Jika perlu, silakan cek saluran dan cocok untuk terminal, misalnya, notebook anda. Kedua komputer Anda (klien) dan Wireless Router harus mengatur ke saluran yang sama untuk koneksi.

Masalah 2:	Kecepatan koneksi Wireless sangat lambat.
Solusi 2:	Sistem nirkabel akan terhubung pada kecepatan tertinggi, tergantung pada jarak dan lingkungan. Untuk mendapatkan kecepatan koneksi tertinggi mungkin, Anda dapat melakukan percobaan dengan: • **Wireless Router location:** Coba ubah lokasi dari Wireless Router. Untuk melihat apakah interferensi radio yang menyebabkan masalah, melihat apakah koneksi mungkin dilakukan ketika dekat dengan Wireless Router. • **Wireless Channels:** Jika interferensi ayng menjadi masalah, ubah channel yang lain dan mungkin menunjukan peningkatan yang baik. • **Radio Interference:** Perangkat lain mungkin menyebabkan interferensi. Anda dapat mencoba untuk mematikan perangkat wireless yang lain, dan lihat apakah ini membantu. Setiap perangkat yang "noisy" harus dilindungi atau direlokasi. • **RF Shielding:** Lingkungan Anda mungkin cenderung memblokir pengiriman data antara stasiun nirkabel. Ini berarti kecepatan akses tinggi hanya mungkin bila dekat dengan Wireless Router.

BAGIAN 6: TENTANG WIRELESS LAN

6.1. BSS (Basic Service Set)

Sekelompok stasiun nirkabel dan jalur akses tunggal, semua menggunakan SSID yang sama (service set identifier), membentuk Basic Service Set (BSS).

Menggunakan SSID (service set identifier) yang sama sangat penting. Perangkat dengan SSID yang berbeda tidak dapat berkomunikasi dengan yang lainya.

6.2. Channels

Wireless channel menetapkan frekuensi radio yang digunakan untuk komunikasi.

- Jalur akses menggunakan saluran tetap. Anda dapat juga dapat memilih saluran yang akan digunakan. Hal ini memungkinkan Anda untuk memilih saluran yang menyediakan dan sedikit gangguan kinerja terbaik. Di Kanada dan Amerika Serikat, ada 11 saluran yang tersedia. Jika menggunakan titik akses banyak, lebih baik jika jalur akses yang berdekatan menggunakan saluran yang berbeda untuk mengurangi gangguan.
- Dalam mode " Infrastructure", stasiun nirkabel biasanya memindai semua saluran, mencari jalur akses. Jika lebih dari satu jalur akses yang dapat digunakan, maka satu sinyal yang terkuatlah yang akan digunakan. (Ini hanya bisa terjadi dalam sebuah ESS (Extended Service Set)).
- ESS: Dalam mode Infrastruktur, satu atau lebih BSS (Basic Service Set) dapat mengatur ESS (Extended Service Set). Pengguna dapat mengakses dan roaming BSS data dan jalur akses harus di set ke ESSID yang sama (Extended Service Set Identifier) untuk memungkinkan roaming.

Catatan untuk pemilik model di US:

Untuk memenuhi peraturan FCC AS, pemilihan negara telah sepenuhnya dihapus dari semua model AS. Fungsi di atas adalah untuk model non-AS saja.

6.3. Security

WEP

.

WEP (Wired Equivalent Privacy) adalah standard untuk mengenkripsi data sebelum dikirim. Hal ini diinginkan karena tidak mungkin untuk mencegah snoopers menerima data yang ditransmisikan oleh stasiun nirkabel Anda. Tetapi jika data dienkripsi, maka berarti kecuali penerima yang dapat mendekripsikannya.

Jika WEP digunakan, stasiun nirkabel dan titik akses harus memiliki pengaturan keamanan yang sama untuk masing-masing sebagai berikut:

WEP	64 Bits, 128 Bits.
Key	Untuk 64 Bits encryption, Nilai Key harus sama. Untuk 128 Bits encryption, Nilai Key harus sama.
WEP Authentication	Open System atau Shared Key.

WPA/ WPA2/ WPA-Mixed

WPA / WPA2 (Wi-Fi Protected Access) adalah lebih aman daripada WEP.Menggunakan "Shared Key" yang memungkinkan kunci enkripsi untuk dibuat ulang pada interval tertentu. Ada beberapa pilihan enkripsi: **TKIP, AES, TKIP-AES** dan setup tambahan untuk **RADIUS** diperlukan dalam metode ini. Yang paling penting di luar fitur WPA menjadi standard melalui 802.11i/WPA2 adalah: pre-authentication, yang memungkinkan roaming cepat aman tanpa latensi sinyal terlihat.

Jika WPA / WPA2 digunakan, stasiun titik akses nirkabel dan harus memiliki pengaturan keamanan yang sama.

802.1x

Dengan **802.1x** authentication, PC nirkabel dapat bergabung dalam jaringan dan menerima pesan yang tidak dienkripsi, bagaimanapun, setup tambahan untuk **RADIUS** untuk mengeluarkan kunci WEP secara dinamis akan diperlukan.
RADIUS adalah authentication, authatauization, dan accounting client-server protocol. Klien adalah akses jaringan server yang keinginan untuk otentikasi link nya. Server memiliki akses ke database user dengan informasi otentikasi.

6.4. Konfigurasi wireless LAN

Untuk memungkinkan stasiun nirkabel (STA) untuk mengakses Access Point (AP), nirkabel stasiun dan access point yang harus menggunakan pengaturan yang sama, sebagai berikut:

Mode	Mode harus di set ke *Infrastructure*.
SSID (ESSID) (Extended Service Set Identifier)	Nama network harus sama dengan Wireless Router. ***Catatan! SSID*** (service set identifier) *adalah* ***case- sensitive.***
Disable	Jika tidak ada security yang diaktifkan pada Wireless Router, security setiap stasiun harus dinonaktifkan juga. Dan, Anda dapat menghubungkan Wireless Router tanpa security, tetapi TIDAK dianjurkan
WEP **Open System/** **Shared Key/** **Auto**	Secara default, WEP pada Wireless Router tidak aktif. Shared Key hanya mendukung WEP sebagai encryption. AUTO (Open/Shared) artinya AP dapat menerima koneksi STA dengan OPEN-WEP atau SHARED-WEP. ● Jika WEP tidak aktif pada Wireless Router, semua stations harus men nonaktifkan fungsi WEP juga. ● Jika WEP aktif pada Wireless Router, setiap station harus menggunakan pengaturan yang sama dengan Wireless Router.
Personal (Pre-Shared Key) **WPA** **WPA2** **WPA2-Mixed**	WPA-PSK (TKIP/AES)/ WPA2-PSK (TKIP/AES): Jika satu dari security ini diaktifkan pada Wireless Router. Setiap STA harus menggunakan algorithms dan passphrase yang sama dengan Wireless Router. **Pre-Shared Key Format:** Memiliki pilihan untuk set Pre-shared key, **Passphrase** dan **Hex (64 karakters)**. Jika **Hex** yang dipilih, pengguna harus memasukkan 64 karakter. Untuk pengaturan yang lebih mudah, **Passphrase** (minimum 8 karakter) yang direkomendasi. **Pre-Shared Key :** Pre-Shared Key berfungsi sebagai password. Pengguna harus memasukkan 8 sampai 63 karakter string jika Anda memilih passphrase. Pastikan password yang sama digunakan olh client untuk melakukan koneksi.
Enterprise (RADIUS) **WPA** **WPA2** **WPA2-Mixed** **802.1x**	**RADIUS Server**: RADIUS adalah otentikasi, authorization dan akuntansi client-server protokol. Client adalah Network Access Server yang keinginan untuk otentikasi link nya. The RADIUS adalah server yang memiliki akses ke database user dengan informasi otentikasi. Setiap stasiun harus mengatur Server RADIUS alamat IP, password dan port yang disediakan oleh ISP anda.

BAGIAN 7: TECHNICAL SUPPORT

7.1. FREE TECHNICAL SUPPORT HOTLINE

Monday to Friday, 9.00 am – 6.00 pm (*Closed on Saturdays, Sundays dan Public Holidays)*

- Singapataue : (65) 6357 0666
- Malaysia : (60) 3 8023 9151
- Indonesia : (62) 21 3483 1717

7.2. WALK-IN SUPPORT

Monday to Friday, 9.00 am – 6.00 pm (*Closed on Saturdays, Sundays dan Public Holidays)*

- Singapataue : FIDA INTERNATIHIDUPAL (S) PTE LTD
  : Block 16 Kallang Place, #06-02 Kallang Basin Industrial Estate, Singapataue 339156.
- Malaysia : FIDA SYSTEMS (M) SDN BHD
  : 29 Jalan USJ 1/31, 47600 Subang Jaya, Selangatau Darul Ehsan, Malaysia.
- Indonesia : PROLiNK INDHIDUPESIA
  : Jl. Cideng Barat No. 79, Jakarta Pusat 10150 - Indonesia.

7.3. HIDUPLINE TECHNICAL SUPPORT

- Singapataue : support@fida.com
- Malaysia : support_my@fida.com
- Indonesia : support@prolink.co.id

Register Online For Your Product Warranty

www.prolink2u.com

SINGAPORE
FIDA INTERNATIHIDUPAL (S) PTE LTD
Block 16 Kallang Place, #06-02 Kallang Basin Industrial Estate, Singapataue 339156.
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